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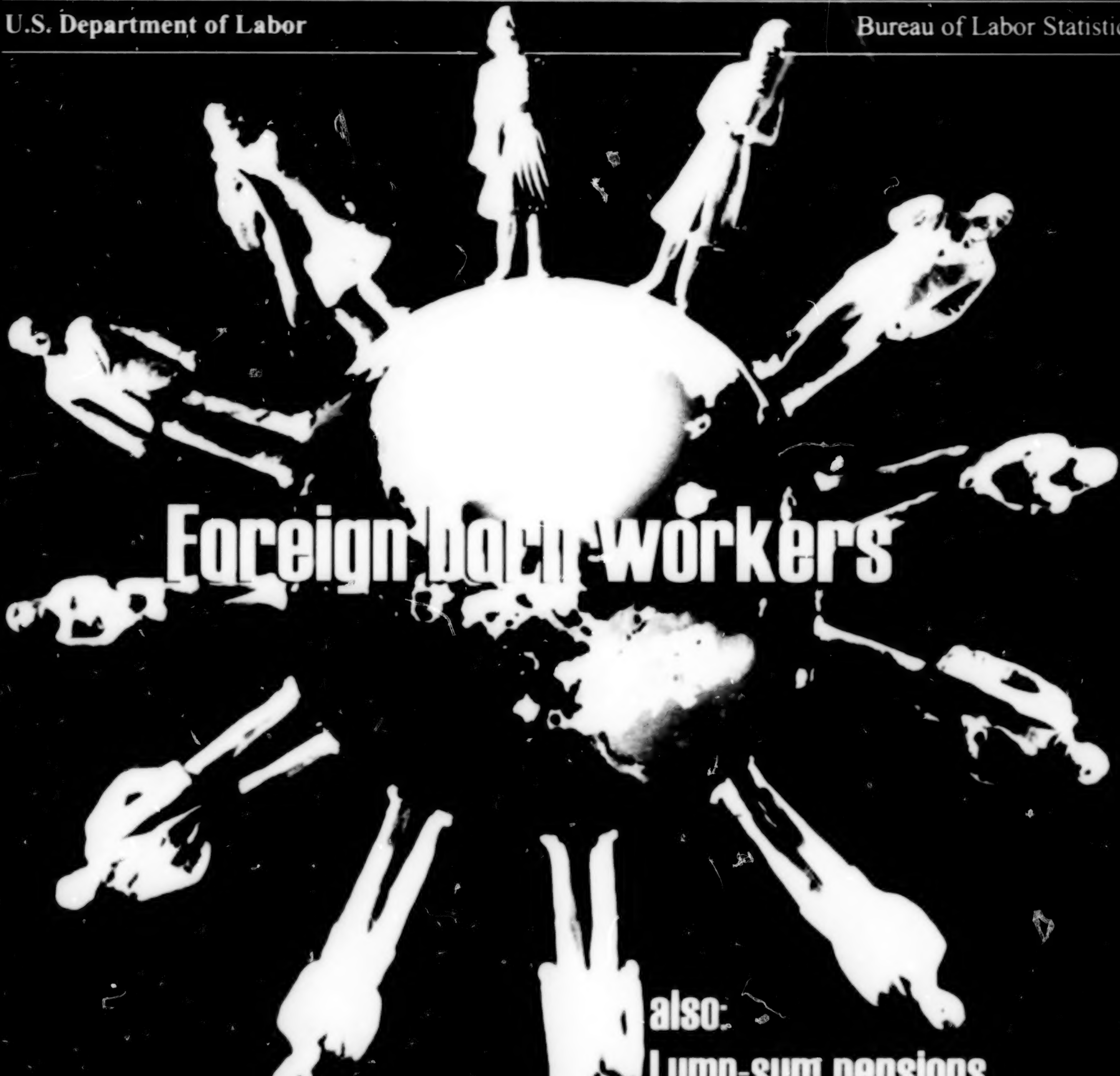

Foreign-born workers

also:
Lump-sum pensions
Labor force 1950-2050

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U.S. Department of Labor
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The May *Review*

Foreign-born workers made up only about 1 in 17 workers in 1960 *versus* 1 in 8 workers in 2000. As Abraham Mosisa points out in his article, the large increase in foreign-born workers is having an impact not only on the aggregate size of the labor force, but on its ethnic, racial, and educational composition as well:

- Immigrants accounted for about half the net increase of the labor force between 1996 and 2000.
- Immigrants today are much more likely to be from Latin America or Asia than they were in 1960 when three-quarters of immigration was from Europe.
- Immigrants tend to be divided between persons with relatively high levels of education and those with relatively low levels, with relatively few in between.

Mitra Toossi extends the horizon of the Bureau's basic labor force projection out to the middle of the century. In general, she finds that labor force growth will, at an average of 0.6 percent per year, be slower over the next 50 years than it was over the previous half-century, that women as a share of the labor force will continue to converge on 50 percent, that a greater share of the labor force will be over 55 years of age, and that the labor force will be more diverse in race and ethnic composition.

It is increasingly common for retirement plans, pension as well as defined contribution, to have an early withdrawal or lump-sum distribution provision. James H. Moore, Jr., and Leslie A. Muller look at some of the factors influencing the decision to take and how to use a lump sum distribution. They find, among other things, that most people save at least some part of any such distribution they might receive and that most spend the rest of the distribution to pay down debt and cover every day expenses.

Joblessness rises among families

Reflecting the economic downturn that began early in 2001, the proportion of families containing at least one unemployed member rose by nearly a percentage point to 6.6 percent between 2000 and 2001. In an average week in 2001, 4.8 million families had at least one member who was unemployed, a rise of 665,000 families from 2000.

The proportion of black families with an unemployed member, 11.4 percent, was higher than that for either Hispanic or white families (9.9 and 5.8 percent respectively). For all three groups, the proportion of families with someone unemployed was higher in 2001 than the year before. Find out more in "Employment characteristics of families in 2001," news release USDL 02–175.

Shift work versus flexible schedules

May 2001, about 29 million full-time wage and salary workers had flexible work schedules that allowed them to vary the time they began or ended work. At the same time, about half that number usually worked an alternate shift—evening, night, irregular, rotating, or split—generally at the behest of their employer.

Men were more likely than women to work an alternate shift. Blacks were more likely than either whites or Hispanics to work such shifts. The proportion of workers on alternate shift schedules had fallen from almost 17 percent in May 1997 to less than 15 percent in May 2001.

Men were also somewhat more likely than women to work flexible schedules in May 2001. In contrast to the case of alternate shifts, flexible schedules were more common among white workers than black or Hispanic workers. The proportions working flexible schedules had risen slightly for most worker groups since 1997. Learn more about flexible work schedules and shift work in "Workers on Flexible and Shift Schedules in 2001," USDL news release 02–225

Lost-time injuries

Truck drivers had more workplace injuries and illnesses involving time away from work than any other occupation in 2000. Truck drivers experienced 136,100 work-related injuries and illnesses that required recuperation away from work beyond the day of the incident. Each year since 1993, truck drivers have had the highest number of such injuries and illnesses of any occupation.

Nonconstruction laborers suffered the second highest number of occupational injuries and illnesses involving time away from work at 87,000, followed by nursing aides and orderlies at 74,200 and construction laborers at 45,400. Additional information is available from "Lost-Worktime Injuries and Illnesses: Characteristics and Resulting Time Away From Work, 2000", news release USDL 02–196.

Industry productivity in 1990s

During the 1990–2000 period, labor productivity—as measured by output per hour—increased in 92 percent of the 170 industries studied by the Bureau of Labor Statistics. Output rose in 85 percent of the industries, while hours of labor increased in only 46 percent of the industries.

Comparing the 1995–2000 period with the 1990–95 period, productivity growth rates increased in 97 of the 170 published industries. In 19 industries, annual output per hour grew at least 5.0 percentage points faster in 1995–2000 than in 1990–95. Another 33 industries posted annual productivity growth rates 2.0–4.9 percentage points above their 1990–95 rates. Learn more in "Productivity and Costs by Industry, 2000," news release USDL 02–237. □

The role of foreign-born workers in the U. S. economy

Foreign-born workers have come to play an increasingly important role in the U.S. economy; between 1996 and 2000, they constituted nearly half of the net increase in the U.S. labor force

Abraham T. Mosisa

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As the 21st century begins, the ethnic and racial composition of the U.S. workforce continues to diversify at a rapid pace. Much of that change reflects an expansion in the share of foreign-born workers, from about 1 in 17 in 1960 to 1 in 8 workers today.[1] Additionally, the geographic areas of origin of those workers have shifted. In 1960, about 3 in 4 of the foreign born had come from Europe; today, that proportion is less than 1 in 6, largely reflecting the influx of immigrants from Latin America and Asia. The large increase in the number of foreign-born workers, which has occurred in recent years, has contributed to the U.S. labor force expansion during that period. Between 1996 and 2000, the foreign born constituted nearly half of the net labor force increase.[2]

This article first reviews the history of immigration, focusing on the changing national origins of the foreign born; then, it presents a comparison of labor force characteristics of the foreign-born population with those of the native-born population; and finally, discusses the role of the foreign born in regards to the labor force growth that occurred between 1996 and 2000.[3] In this article, contrary to the customary BLS practice of counting Hispanics (an ethnic group) as part of the race category to which they belong, Hispanics are not included in the estimates for whites, blacks, and Asians, but, instead, are shown separately.[4] This was done because currently Hispanics constitute a large proportion of the foreign born, and they have distinctive characteristics, which will be outlined further throughout this article. Hence, if they were included in the estimates for the major race group, clear-cut comparisons of employment characteristics among the groups would be difficult to make. The data used in this study are primarily from the Current Population Survey (CPS), the monthly survey of about 60,000 households conducted by the Bureau of the Census for the Bureau of Labor Statistics.[5]

Whence come the foreign born?

Over the past 2 centuries, the geographic sources of immigration to the United States have changed.[6] During the 18th and much of the 19th centuries, immigrants generally came from two areas of the world, Northern Europe and Africa. Most often, the European immigrants came from the British Isles, with a major influx moving from Ireland around the middle of the 19th century, as large numbers of the Irish fled starvation and disease, brought about by the potato blight that struck much of Europe at that time. The African slave trade, which had begun during the Colonial era to provide workers in the New World, continued through most of the first half of the 19th century, despite laws that attempted to ban it.[7]

Moreover, Asia was a source of immigrants after 1848, as Chinese contract laborers were brought largely to the West Coast to work both in the gold mines and on the transcontinental railway. The large influx of Chinese laborers, however, was ended with the Chinese exclusionary legislation that forbade Chinese immigration.[8]

Foreign-born population by country of birth, annual averages, 2000

[Numbers in thousands]

Country[1]	Population	Country[1]	Population
Mexico	7,870.6	Greece	112.7
Philippines	1,227.1	Argentina	112.3
India	1,027.3	Nigeria	106.1
China	948.4	Lebanon	101.2
Cuba	922.3	Israel	94.4
El Salvador	795.7	Scotland	92.9
Vietnam	777.7	Indonesia	87.7
Korea/South	715.2	Turkey	86.2
Canada	688.0	Romania	85.9
Dominican Republic	600.6	Ghana	83.7
Germany	598.2	Laos	81.0
Jamaica	488.4	Armenia	80.9
Colombia	483.5	Holland/Netherlands	80.3
England	479.3	Hungary	79.7
Haiti	463.5	Bangladesh	79.0
Italy	437.6	South Africa	77.1
Russia	431.8	Iraq	76.2
Poland	430.4	Chile	74.9
Taiwan	316.1	Spain	71.1
Japan	306.3	Dominica	67.2
Peru	293.6	Ethiopia	67.0
Guatemala	277.5	Panama	64.8
Ukraine	275.5	Austria	64.5
Iran	270.4	Costa Rica	52.0
Honduras	256.8	Uruguay	51.9
Nicaragua	253.8	Lithuania	48.9
Ecuador	241.8	Sweden	47.9
Pakistan	211.5	Barbados	47.2
Guyana	210.5	Switzerland	45.1
Hong Kong	192.0	Malaysia	43.3
Trinidad and Tobago	178.8	Syria	42.4
Ireland/Eire	170.9	Afghanistan	40.5
Brazil	169.2	Bolivia	39.2
Portugal	154.8	Jordan	38.5
Thailand	131.1	Australia	37.1
Yugoslavia	128.3	Belize	37.0
Egypt	120.2	Morocco	35.2
Venezuela	115.7	Burma	34.0
France	114.9	Azores	31.8
Cambodia	114.9		

[1] Country not shown where the number is under 30,000.

SOURCE: Current Population Survey.

By the early 1900s, European immigration patterns had shifted, with the majority of the newcomers arriving from southern and eastern Europe. These people were often poorly educated and came from areas with cultural and linguistic traditions that were considerably different from those of northwestern Europe. Further, among the Europeans immigrating to the new country were sizable numbers of Roman Catholics.[9]

In 1917, Congress passed a Literacy Act to restrict European immigration, and in 1921, the Emergency Quota Act was also passed, which applied immigration quotas based on nationality or country of origin. The provisions of this act were extended and made more restrictive by the National Origins Act of 1924. The quota system was reaffirmed in the Immigration and Nationality Act of 1952. Aside from a few exceptions, these quotas remained relatively intact until the Immigration and Nationality Act of 1965 was passed, which eliminated the system of national origin, race, or ancestry quotas for immigration to the United States.

Not only did the new act lead to a substantial increase in immigration, but also to a change in the geographic origin of immigrants. Between 1960 and 2000, the proportion of the foreign-born population that had come from Europe dropped from 74.5 percent to 15.3 percent, while the proportion coming from Latin America increased from 9.3 percent to 51 percent. (See table 1.)

Regional data, however, do not accurately capture the wide-ranging diversity of immigrants; it is better understood when examined by country of origin. As shown in the box, the top ten leading countries of birth of the foreign-born population in 2000 were Mexico, the Philippines, India, China, Cuba, El Salvador, Vietnam, South Korea, Canada, and the Dominican Republic.

Labor force status of the foreign born

Overall, the foreign born are less likely than the native born to participate in the U.S. labor force, primarily because foreign-born women are considerably less likely than their native-born counterparts, overall, to be working or looking for work. Some of the reasons for this are discussed below. (See table 2.) Foreign-born men—even though they (like foreign-born women) tend to be less educated than native-born men—are more likely to be labor force participants than their native-born counterparts, except for college graduates, a category in which the two groups' participa-

Table 1 Geographic area of birth of the foreign-born population in the United States, 1850–2000

Geographic area	Year						
	1850[1]	1900[1]	1960[1]	1970[1]	1980[1]	1990[1]	2000[2]
Total foreign born (in thousands)	2,245	10,341	9,738	9,619	14,080	19,767	28,379
Percent distribution							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Europe	90.5	85.9	74.5	59.7	36.6	22.0	15.3
Northern and Western	90.1	69.7	34.2	27.3	16.9	10.4	6.7
Ireland	42.8	15.6	3.5	2.6	1.4	.9	.7
Southern and Eastern	4.0	16.2	40.1	32.1	19.5	11.6	8.4
Asia	1.0	1.2	5.0	8.6	18.0	25.2	25.5
China	(3)	.8	1.0	1.8	2.0	2.7	4.9
Latin America	.9	1.3	9.3	18.8	31.1	42.5	51.0
Mexico	.6	1.0	5.9	7.9	15.6	21.7	27.6
Other[4]	8.5	11.6	11.1	13.0	14.3	10.3	8.1

[1] Data are from the U.S. Census Bureau, Public-Use Microdata Samples (PUMS).

[2] Data from the March Current Population Survey.

[3] Less than 0.05 percent.

[4] Other includes Africa, Oceania, North America, and not reported.

Table 2 Employment status of the civilian population 16 years and older, by sex, annual averages, 2000

[Numbers in thousands]

Labor force status and country of birth	Total	Foreign born		Native born
		Total	Percent of total	
Total	209,699	26,527	12.7	183,173
In labor force	140,863	17,705	12.6	123,158
Labor force participation rate	67.2	66.7	–	67.2
Employed	135,208	16,954	12.5	118,254
Employment-population ratio	64.5	63.9	–	64.6
Unemployed	5,655	751	13.3	4,904
Unemployment rate	4.0	4.2	–	4.0
Not in the labor force	68,836	8,821	12.8	60,015
Men	100,731	13,106	13.0	87,625
In labor force	75,247	10,462	13.9	64,785
Labor force participation rate	74.7	79.8	–	73.9
Employed	72,293	10,067	13.9	62,226
Employment-population ratio	71.8	76.8	–	71.0
Unemployed	2,954	396	13.4	2,559
Unemployment rate	3.9	3.8	–	3.9
Not in the labor force	25,484	2,644	10.4	22,840
Women	108,968	13,420	12.3	95,548
In labor force	65,616	7,243	11.0	58,373
Labor force participation rate	60.2	54.0	–	61.1
Employed	62,915	6,887	10.9	56,028
Employment-population ratio	57.7	51.3	–	58.6
Unemployed	2,701	356	13.2	2,345
Unemployment rate	4.1	4.9	–	4.0
Not in the labor force	43,352	6,177	14.2	37,175

tion rates were about the same.

Participation rates among women. For women, the difference was greatest for those aged 16 to 24 and 25 to 34, where the participation rates for the foreign born were about 17 percentage points lower than those of their native-born counterparts. (See table 3.) A number of factors appear to play a role in the differences between these two groups of young women, including marital status, the presence of children, and, probably most importantly, education.

Among the 16- to 24-year-olds, a higher percentage of the foreign-born women had not completed high school, com-

Table 3 **Labor force participation rates of the foreign born and native born by selected demographic characteristics, annual averages, 2000**

Characteristic	Total		Men		Women	
	Foreign born	Native born	Foreign born	Native born	Foreign born	Native born
Age						
Total, 16 years and older	66.7	67.2	79.8	73.9	54.0	61.1
16 to 24 years	60.2	66.6	70.6	68.4	47.8	64.9
25 to 34 years	77.0	86.2	92.1	93.6	61.4	79.2
35 to 44 years	82.1	85.3	94.0	92.4	69.7	78.4
45 to 54 years	80.0	82.9	88.4	88.3	69.6	77.8
55 to 64 years	59.1	59.2	73.6	66.5	47.3	52.4
65 years and older	12.1	12.9	18.6	17.4	7.4	9.6
Education[1]						
Less than a high school diploma	59.0	37.4	78.0	46.7	41.4	29.2
High school graduates, no college	66.5	64.4	81.4	74.3	54.1	55.9
Some college, no degree	72.5	72.2	81.7	79.2	63.9	65.9
College graduates	76.9	79.9	85.3	84.3	67.4	75.2
Race/ethnicity						
White, non-Hispanic	59.1	67.6	71.0	74.9	48.0	60.8
Black, non-Hispanic	75.0	64.9	80.6	67.6	69.4	62.8
Asian, non-Hispanic	67.3	66.1	77.8	70.0	58.2	62.3
Hispanic origin	69.5	67.7	85.4	74.8	52.5	61.4

[1] Educational attainment data are for persons 25 years and older.

pared with the native-born. Not surprisingly, among both groups, the participation rates for those without a high school diploma were lower than the rates for those with more education. However, the participation rate for the foreign born without a high school diploma was considerably lower than that for the native born. At least in part, this is because the foreign born who had not graduated from high school were almost 5 times as likely to be married and more than twice as likely to have children than their native-born counterparts; being married or having children tends to reduce women's likelihood of being in the labor force.

In addition, the foreign born aged 16 to 24, who had attended or graduated from college, were also markedly less likely than their native-born counterparts to be in the labor force. In this instance, however, there is relatively little difference in the proportions who are married or have children. Participation rate differences among high school graduates who did not go to college were much smaller.

Among those women who were 25 to 34, the lower overall participation rate for the foreign born has varying causes. In part, the fact that a larger proportion of the foreign born do not have a high school diploma is reflected in their participation rates, which are usually lower than the rates of better-educated people. Even so, this is not the entire explanation, because the better-educated foreign born also are less likely to be labor force participants when compared with their native-born counterparts. Among those with a high school diploma or those with some college but no degree, the lower participation rates of the foreign born may reflect to some extent their greater likelihood of being married or having children. Among those with college degrees, the lower participation rate of the foreign born may also be due in part to the higher proportion who are married. Both foreign-born and native-born college graduates are about equally likely to have children.

Race and Hispanic origin. Among the foreign-born population, labor force participation rates for whites were lower than for any other race/ethnic group. (See table 3.) This occurred at least partly because foreign-born whites are older on balance than are other groups, and labor force participation falls dramatically after age 55, as indicated in the following tabulation. (As noted earlier, prior to the Immigration and Naturalization Act of 1965, immigrants to the United States came primarily from Europe. In subsequent decades, immigrants have increasingly come from Asia and Central and South America.)

Country of birth, race, and ethnic origin	*55 years and older*	
	Percent	*Labor force participation rate*
White, non-Hispanic		
Native born	29.6	32.5
Foreign born	37.1	29.1
Black, non-Hispanic		
Native born	21.1	29.0
Foreign born	14.4	48.4
Asian, non-Hispanic		
Native born	15.4	31.3
Foreign born	19.8	38.3
Hispanic		
Native born	16.1	31.4
Foreign born	16.1	35.0

Among blacks, Asians, and Hispanics, the participation rates for the foreign born were either about the same as those of their native-born counterparts, or, as in the case of blacks, much higher. In contrast, foreign-born whites were less likely than their native-born counterparts to be labor force participants. For both Asians and Hispanics, the similarity in overall participation rates between the foreign born and native born was due to the fact that the participation rates for the foreign-born women in these groups were lower than those of the native-born women, offsetting the much higher rates of the foreign-born men. Among blacks, the participation rates for both foreign-born men and women were much higher than those of their native-born counterparts. (See table 3.)

Education. For the foreign born and the native born 25 years of age and older, labor force participation is quite similar at each education level, except for those without high school diplomas. Approximately 59 percent of the foreign born, who were not high school graduates were in the labor force, compared with 37.4 percent of the native born. This probably reflects the economic motivation many had for coming to this country, as well as the fact that they are younger, on average,

Table 4. Unemployment rates of the foreign born and native born by selected demographic characteristics, annual averages, 2000

Characteristic	Total		Men		Women	
	Foreign born	Native born	Foreign born	Native born	Foreign	Native born
Age						
Total, 16 years and older	4.2	4.0	3.8	3.9	4.9	4.0
16 to 24 years	7.9	9.5	7.4	10.0	8.7	8.9
25 to 34 years	3.9	3.7	3.1	3.5	5.1	3.9
35 to 44 years	3.8	2.9	3.2	2.7	4.7	3.1
45 to 54 years	3.2	2.4	2.9	2.4	3.5	2.3
55 to 64 years	3.9	2.3	3.8	2.3	4.1	2.3
65 years and older	4.1	3.0	4.7	3.2	3.1	2.7
Education[1]						
Less than a high school diploma	5.8	6.7	4.6	6.0	7.8	7.8
High school graduates, no college	3.3	3.5	2.9	3.5	3.9	3.5
Some college, no degree	3.3	2.8	3.0	2.6	3.7	3.0
College graduates	2.3	1.6	2.1	1.4	2.6	1.7
Race/ethnicity						
White, non-Hispanic	3.2	3.2	2.9	3.2	3.6	3.2
Black, non-Hispanic	5.4	7.9	5.5	8.5	5.2	7.4
Asian, non-Hispanic	3.2	4.7	3.2	4.9	3.2	4.5
Hispanic origin	5.1	6.4	4.2	6.0	6.7	6.8

[1] Educational attainment data are for persons 25 years and older.

The foreign born and education

Understanding the educational characteristics of the foreign-born population is key to interpreting several features of their labor-force patterns, in particular, their occupational distribution. The foreign-born population tends to be divided mainly into two educational categories: those with relatively high levels of education and those with relatively low levels, with few in-between the two categories. (See chart below.) When the educational attainment of the foreign-born and native-born populations, 25 years and older are compared, the foreign born are much more likely to have left school before completing a high school diploma than are the native born, but about as likely to have college degrees as the native-born population.[1]

This phenomenon is due to the large share of immigrants now coming from Latin America and Mexico in particular. In 2000, about half of the foreign-born population was from Latin America, including Mexico. Educational levels among foreign-born Hispanics differ sharply from the other ethnic groups. About 55 percent of the foreign-born Hispanic population 25 years and older had less than a high school education, while 9.5 percent had college degrees in 2000. By comparison, only 15.4 percent of foreign-born Asians had not completed high school, while 46.5 percent had graduated from college. The proportions of foreign-born whites and blacks who had not completed high school were 16.4 percent and 19.9 percent, respectively, while the proportions of those with college degrees were 34.6 percent and 25.6 percent, respectively.

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[1] A study in 1998 by Betts and Lofstrom concludes that the upper half of the immigrant population has been and continues to be at least as highly educated as the upper half of the native-born population. The observed decline in the mean level of immigrants' education relative to that of natives reflects a decline in the relative educational status of the bottom half of the immigrant population. See Julian R. Betts and Magnus Lofstrom, "The educational attainment of Immigrants: Trends and Implications," NBER Working Paper Series, October 1998.

Civilian noninstitutional population, 25 years and older by educational attainment, annual averages, 2000

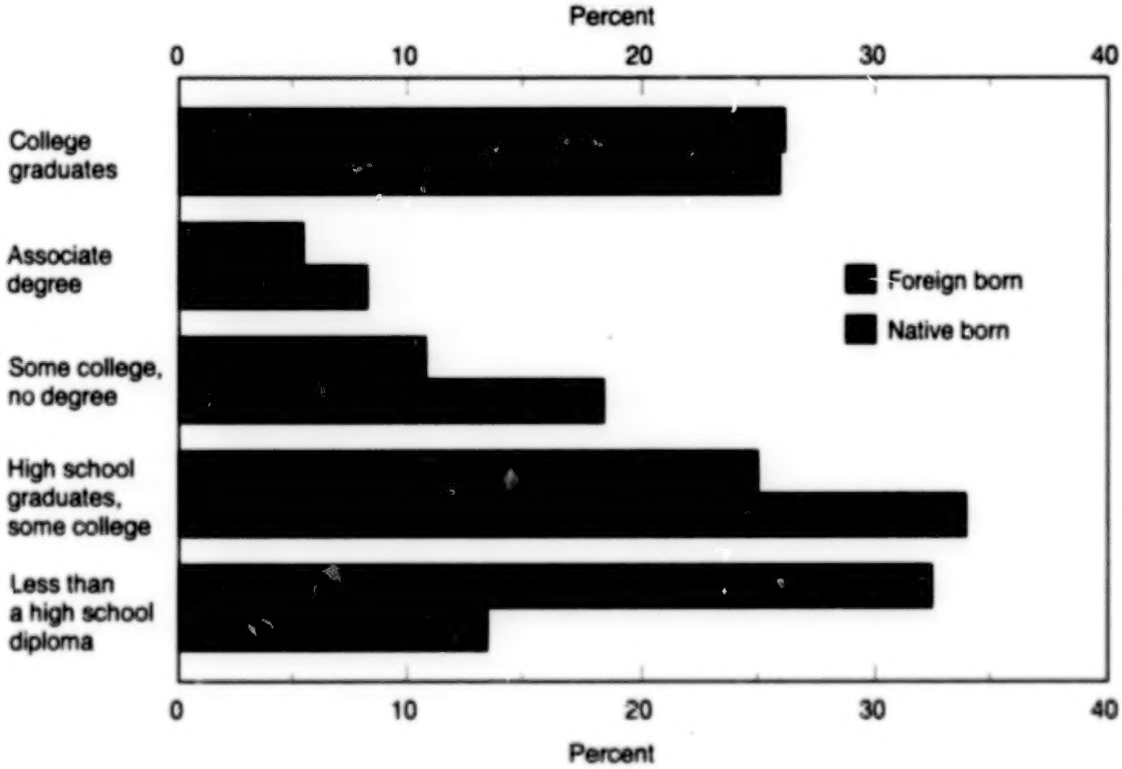

Table 5. **Distribution of the foreign born and the native born by major occupations, annual averages, 2000**

[In percent]

Occupation	Total		Men		Women	
	Foreign born	Native born	Foreign born	Native born	Foreign born	Native born
Total	100.0	100.0	100.0	100.0	100.0	100.0
Executive, administrative, and managerial	9.9	15.3	9.8	15.8	10.0	14.8
Professional specialty	13.5	15.9	12.9	13.6	14.5	18.5
Technicians and related support	2.9	3.3	2.7	3.0	3.2	3.6
Sales occupations	9.8	12.4	8.7	11.8	11.3	13.1
Administrative support, including clerical	8.9	14.5	4.6	5.6	15.3	24.5
Service occupations	18.9	12.7	13.4	9.5	26.9	16.4
Protective service	.8	1.9	1.1	2.9	.4	.8
Private household	1.8	.4	.1	0	4.4	.8
Service, except private household and protective	16.3	10.4	12.2	6.5	22.2	14.8
Precision production, craft, and repair	12.8	10.8	19.0	18.7	3.6	2.0
Operators, fabricators, and laborers	18.9	12.8	22.7	18.8	13.5	6.1
Farming, forestry, and fishing	4.4	2.2	6.3	3.3	1.6	1.1

than their native-born counterparts. Among college graduates, however, the native born were more likely to be labor force participants.

Unemployment. The unemployment rate was 4.2 percent for the foreign born, compared with 4.0 percent for the native born in 2000. Except for 16- to 24-year-olds, the unemployment rate of the foreign born is higher than for the native born for all age groups. (See table 4.) The gap tends to increase with age. For example, the unemployment rate among the foreign born 25- to 34-year-olds is not much different—0.2 percentage point—than that for the native born in the same age group; among 55- to 64-year-olds, however, the gap increases to 1.6 percentage points. Most of the differences in rates are a reflection of the higher unemployment rates for foreign-born women compared with the rates of their native-born counterparts. Among the major race and ethnic groups, the unemployment rates for foreign-born and native-born whites are the same, while among Asians, blacks, and Hispanics, the rates for the foreign born are lower than for their native-born counterparts.

Occupation. The occupational distribution of foreign-born workers, when compared with that of the native born offers some insights into the economic role of the foreign born in this country. The proportion of the foreign born employed in professional specialty occupations (13.5 percent), which usually require a college degree, was close to that of the native born (15.9 percent). (See table 5.) The similarity in the proportion of the foreign born and the native born with college degrees helps explain the two groups' similar representation in professional specialty occupational categories. In contrast, only 9.9 percent of the foreign born were employed as executives, administrators, and managers—occupations that also tend to require a college education—compared with 15.3 percent for the native born. Seniority, and language problems for non-English speakers, are two reasons why the foreign born most likely are underrepresented in executive and administrative occupations.

The foreign born tend to be overrepresented in low-paying occupations, which often do not require the completion of high school. In 2000, about 19 percent of the foreign born were employed in service occupations, and another 19 percent worked as operators, fabricators, and laborers. A little less than 13 percent of the native born were employed in each of these occupational categories. Poorer educational background, language difficulties, and unfamiliarity with the U.S. job market are likely explanations for the high proportion of foreign born in lower-paying jobs.

Earnings. Overall, foreign-born workers earned about 75.6 cents for every dollar earned by the native born in 2000—$447 compared with $591, respectively.[10] Among men, the median weekly earnings of the foreign born was 70.6 percent that of natives. The earnings gap was much narrower among women—81.4 percent. (See table 6.)

At each level of education, the foreign born earned less than the native born.[11] However, the relative gap in median weekly wage and salary earnings was narrowest among college graduates. At each level of education, the earnings gap was narrower among women than among the men.

Among the major race and ethnic groups, median weekly

Table 6 **Median usual weekly earnings of foreign born and native born full-time wage and salary workers, by selected demographic characteristics, annual averages, 1996–2000**

Characteristic	Median weekly earnings in constant dollars[1]					
	Foreign born		Native born		Percent change, 1996–2000	
	1996	2000	1996	2000	Foreign born	Native born
Total, 16 years and older	$423	$447	$552	$591	5.7	7.1
Men	443	477	638	676	7.7	6.0
Women	390	407	467	500	4.4	7.1
Age						
16 to 24 years	$295	$314	$332	$369	6.4	11.1
25 to 34 years	404	433	525	574	7.2	9.3
35 to 44 years	465	499	634	652	7.3	2.8
45 to 54 years	505	516	666	690	2.2	3.6
55 to 64 years	481	483	607	635	.4	4.6
65 years and older	400	381	427	457	–4.8	7.0
Education[2]						
Less than a high school diploma	$314	$322	$376	$389	2.5	3.5
High school graduates, no college	410	420	497	514	2.4	3.4
Some college, no degree	510	524	574	604	2.7	5.2
College graduates	789	852	841	902	8.0	7.3
Race/ethnicity[3]						
White, non-Hispanic	$653	$670	$632	$662	2.6	4.7
Black, non-Hispanic	442	481	453	496	8.8	9.5
Asian, non-Hispanic	564	641	665	704	13.7	5.9
Hispanic origin	347	367	484	513	5.8	6.0

[1] Consumer Price Index research series using current methods (CPI-U-RS) was used to convert 1996 current dollars to 2000 constant dollars.

[2] Educational attainment data are for persons 25 years and older.

[3] Race/ethnicity data are for 25 years and older.

earnings of foreign-born blacks and whites at each education level were not much different from that for their native-born counterparts. Among Asians and Hispanics, however, the foreign born typically earned less at every educational level.

Trends, 1996–2000

The foreign born played an important role in the 1996–2000 labor-force expansion. During this period, foreign-born workers 16 years and older constituted 48.6 percent of the total labor force increase of 6.7 million.[12] (See table 7.) Nearly two-thirds of the increase in the number of men in the labor force, and more than a third of the increase among the women were foreign-born workers.

Among some age groups where labor force participation was already high, most of the labor force increase occurred among the foreign born. For instance, over 80 percent of the net labor force increase among 35- to 44-year-old workers was attributable to the foreign born. In other age groups the number of native born in the labor force declined, while the number of foreign-born participants rose. For example, among labor force participants aged 25 to 34, the number of native born declined by about 2.8 million, while the number of foreign born grew by over 630,000.

The foreign born accounted for very large shares of the overall labor force increase among Asians and Hispanics. About 83 percent of the increase among Asians and 64.7 percent of the increase among Hispanics were foreign born. The corresponding proportions for blacks and whites were 28.4 percent and 27.9 percent, respectively.

Census regions. In 2000, a third of the foreign-born workforce resided in the Pacific region, two-and-a-half times the share of all native-born workers who live in the region. The follow-

Table 7. **Foreign born as percent of labor force change by selected demographic characteristics, annual averages, 1996–2000**

[Numbers in thousands]

Age and sex	Total labor force change	Foreign born labor force change	Change in foreign born as percent of total
Total, 16 years and older	6,733	3,272	49
Men	3,062	1,925	63
Women	3,671	1,348	37
Age			
16 to 24 years	1,461	426	29
25 to 34 years	–2,166	632	–
35 to 44 years	1,242	1,018	82
45 to 54 years	4,047	823	20
55 to 64 years	1,820	278	15
65 years and older	329	68	21
Education[1]			
Less than a high school diploma	–393	654	–
High school graduates, no college	[2]	733	–
Some college, no degree	629	210	33
College graduates	3,883	1,073	28
Race/ethnicity			
White, non-Hispanic	1,940	542	28
Black, non-Hispanic	1,290	366	28
Asian, non-Hispanic	819	683	83
Hispanic	2,566	1,661	65

[1] Educational attainment data are for persons 25 years and older.

[2] Missing values.

NOTE: Dash indicates negative value.

ing tabulation shows that the other regions with large shares of the foreign-born workers were the Middle Atlantic (18.4 percent), and the South Atlantic (16.3 percent):[13]

Regions	Foreign born	Native born
U.S. total	100.0	100.0
New England	4.4	5.2
Middle Atlantic	18.4	12.9
South Atlantic	16.3	18.4
East South Central	1.2	6.6
West South Central	9.8	10.9
East North Central	8.6	17.8
West North Central	2.3	8.0
Mountain	5.5	6.5
Pacific	33.4	13.8

Within the broad geographic regions, the foreign-born workforce was concentrated in just a few States. Approximately 60 percent of the foreign-born workforce in 2000 were living in just 4 States—California (30 percent), New York (12.5 percent), Florida (9.3 percent), and Texas (8.9 percent).

At least two factors may help explain the differing concentrations of the foreign-born workforce; labor migration occurs towards regions where economic opportunity is perceived to be better. Another consideration is that immigrants generally prefer to settle in States where large numbers of people of their ethnic origin have settled earlier. There are several reasons for the new arrivals to look for ethnic enclaves. Not only can the newcomers continue to live in a familiar culture, communicate in their mother tongue, and share their ethnic cuisine by joining their kin, they also can use their ethnic group as a social network for gaining employment. Sometimes, such ethnic cultures can survive for generations, albeit with modifications, as each new generation begins to integrate new traditions with the old, even after immigration from the old country declines or totally ceases.[14] The following tabulation shows regions that included States with relatively large numbers of foreign-born workers also had very high labor force growth over the 1996–2000 period:

Regions [Numbers in thousands]	Labor force change, 1996–2000: Total	Labor force change, 1996–2000: Foreign born	Change in foreign born as percent of total
New England	142	128	90.1
Middle Atlantic	456	412	90.4
South Atlantic	1,511	801	51.6
East South Central	294	80	27.2
West South Central	695	337	48.5
East North Central	779	322	41.3
West South Central	133	123	92.5
Mountain	849	242	28.5
Pacific	1,834	827	45.1

The foreign-born labor force growth in the Pacific Region accounted for almost half the total labor force growth in the five-State region. In California, the foreign born accounted

Table 8. **Percent distribution of employed foreign born and native born by occupation, annual averages, 1996–2000**

Occupation	Foreign born		Native born	
	1996	2000	1996	2000
Total	100.0	100.0	100.0	100.0
Executive, administrative, and managerial	10.6	9.9	14.4	15.3
Professional specialty	12.7	13.5	14.4	15.9
Technicians and related support	2.6	2.9	3.2	3.3
Sales occupations	9.7	9.8	12.4	12.4
Administrative support, including clerical	9.8	8.9	15.0	14.5
Service occupations	19.5	18.9	12.9	12.7
Protective service	.8	.8	1.8	1.9
Private household	1.9	1.8	.5	.4
Service, except private household and protective	16.8	16.3	10.5	10.4
Precision production, craft, and repair	11.5	12.8	10.6	10.8
Operators, fabricators, and laborers	19.0	18.9	13.8	12.8
Farming, forestry, and fishing	4.7	4.4	2.6	2.2

for 46 percent of the State's labor force growth over the period. In the South Atlantic region, the foreign-born labor-force growth accounted for 52 percent of the region's total labor force growth; foreign born constituted about 78 percent of Florida's total growth.

Occupational trends. The occupational distribution of the foreign born changed over the 1996–2000 period. (See table 8.) The proportion of foreign-born workers who worked in executive, administrative, and managerial occupations declined, while it rose in professional specialty, and precision, production, craft, and repair occupations. Among the native born, the proportion both in executive, administrative, and managerial occupations and professional specialty occupations rose, while it declined in most of the lower-paying occupations.

The foreign born constituted a large share of the 1996-2000 employment increases in several major occupation groups. (See table 9.) They accounted for half or more of the increase in administrative support; services; precision, production, craft and repair; and operators, fabricators, and laborers. In some occupations, employment declined among natives, while gaining among the foreign born. For example, the number of native-born workers employed in farming, forestry and fishing occupations fell by 295,000 between 1996 and 2000 just as the number of foreign-born workers in these occupations rose by 117,000. Within service occupations, all of the net employment increase among private household workers was attributable to the foreign born.

Earnings trends. Over the 1996 to 2000 period, the usual median weekly earnings of both foreign-born and native-born wage and salary workers who worked full time increased overall. In constant dollars, the median for the foreign born grew by 5.7 percent, while that for the native born increased by about 7 percent. The earnings of foreign-born men grew somewhat faster than that of their native-born counterparts, while among women, the reverse was true. (See table 6.)

Earnings of both groups increased for all age categories, with the exception of foreign-born men, 55- to 64-years-old. The earnings increases among the foreign born were larger among 25- to 34-year-olds and 35- to 44-year-olds, than for those in other age groups; while among the native born, the increase in the earnings was most pronounced among 16- to 24-year-olds, followed by 25- to 34-year-olds. The median weekly earnings increased both among the foreign born and the native born at nearly all education levels between 1996 and 2000. College graduates experienced the largest inflation-adjusted earnings increase, gaining 7.3 percent and 8.0 percent, respectively, for the native born and the foreign born.

Except for Asians, earnings of the native born grew slightly more between 1996 and 2000 than did the earnings of the foreign born. Among Asians, however, the usual median weekly earnings of those who were foreign-born grew by nearly 14 percent, more than twice the gain for their native-born counterparts. The fact that the percent of foreign-born Asians with college degrees jumped by 4.4 percentage points compared with an increase of only 1.3 percentage points for their native-born counterparts partly explains the higher earnings increase among foreign-born Asians between 1996 and 2000.

Current labor force status of the foreign born

The economic downturn that began in March 2001 had unexpectedly different effects on the foreign born than on the native born. For instance, the labor force participation rate of the foreign born increased by 0.4 percentage point to 67.1 percent between 2000 and 2001, while that for the native born declined by 0.3 percentage point to 66.9 percent. The increase in labor force participation among the foreign born stems from the fact that foreign-born women's participation rate increased by 0.5 percentage point, while the rate for their male counterparts was about unchanged. In contrast, among the native born the participation rates of both men and women declined—by 0.4 and 0.2 percentage point, respectively. About three-fourths of the overall labor force increase between 2000 and 2001 occurred among the foreign born.

Looking at employment, the number of employed foreign born increased by 491,000 over the year, while the number of employed native born declined by 897,000. Almost all of the increase among the foreign born occurred in services; executive, administrative, and managerial; and in professional specialty occupations, while employment losses among the native born were primarily concentrated in lower-paying occupations including operators, fabricators, and laborers; sales; administrative support; and farming, forestry, and fishing occupations. The employment population ratios of both groups declined over the year. The decrease was greater among the native born (–0.8 percent) than among the foreign born (–0.4 percent).

The behavior of the unemployment rate for both the foreign born and the native born, however, was consistent with the contracting economy. The jobless rate for both groups increased over the year. Between 2000 and 2001, the unemployment rate of the foreign born increased by 1.1 percentage points to 5.3 percent, while the rate for the native born increased by 0.7 percentage point to 4.7 percent.

Table 9. Foreign born as a percent of employment change by occupation, and sex, annual averages, 1996–2000

[Numbers in thousands]

Occupation	Employment change		Change in foreign born as percent of change in total
	Total	Foreign born	
Total	8,390	3,531	42.1
Executive, administrative, and managerial	2,014	251	12.5
Professional specialty	2,351	589	25.1
Technicians and related support	460	146	31.7
Sales occupations	923	350	37.9
Administrative support, including clerical	355	203	57.2
Service occupations	1,091	592	54.3
Protective service	213	29	13.6
Private household	–16	60	–
Service, except private household and protective	894	503	56.3
Precision production, craft, and repair	1,267	618	48.8
Operators, fabricators, and laborers	105	664	632.4
Farming, forestry, and fishing	–178	117	–
Men	4,032	2,079	51.6
Executive, administrative, and managerial	822	118	14.4
Professional specialty	959	328	34.2
Technicians and related support	254	90	35.4
Sales occupations	454	175	38.5
Administrative support, including clerical	88	65	73.9
Service occupations	281	142	50.5
Protective service	135	23	17.0
Private household	–4	1	–
Service, except private household and protective	149	118	79.2
Precision production, craft, and repair	1,142	565	49.5
Operators, fabricators, and laborers	227	502	221.1
Farming, forestry, and fishing	–196	95	–
Women	4,361	1,452	33.3
Executive, administrative, and managerial	1191	133	11.2
Professional specialty	1,392	261	18.8
Technicians and related support	206	56	27.2
Sales occupations	471	175	37.2
Administrative support, including clerical	267	138	51.7
Service occupations	812	450	55.4
Protective service	78	6	7.7
Private household	–12	58	–
Service, except private household and protective	746	385	51.6
Precision production, craft, and repair	126	54	42.9
Operators, fabricators, and laborers	–122	163	–
Farming, forestry, and fishing	18	22	122.2

NOTE: Dash indicates negative value.

THE ETHNIC AND RACIAL COMPOSITION of the U.S. population is more diverse now than at any time since the Nation's founding. In 2000, the foreign born constituted about 13 percent of the population, whereas 40 years earlier, the proportion was about half that. The foreign-born population in the United States today has come from a multitude of countries and cultures around the world. The largest group is of Hispanic origin, constituting nearly half of the immigrant population.

The diverse background of the foreign born makes it difficult to generalize about its role in the U.S. workforce. Today's foreign born not only bring racial and ethnic diversity, but also a wide-ranging array of age, skills, and education. Levels of education are very low among some groups. In 2000, about 55 percent of the foreign-born Hispanic population 25 years and older had not completed high school, while 9.5 percent had college degrees. In contrast, only 15.4 percent of foreign-born Asians had not completed high school, while 46.5 percent were college graduates.

The labor force participation rates for foreign-born men were higher than for their native-born counterparts, while for the women, the opposite was true. Unemployment rates for the foreign born are not much different from those for the native born. Also, while the employed foreign born tend to be more concentrated in lower-skilled, lower-paying occupations than the native born, about the same proportions of each group can be found working in professional specialty and precision production, craft and repair occupations, both of which are typically higher-paying job categories.

With regard to weekly earnings, the foreign born generally earn less than their native-born counterparts, except among college graduates. The earnings of foreign-born college graduates are very similar to that of their native-born counterparts.

Between 1996 and 2000, when employment in the United States was expanding rapidly and unemployment was falling, the foreign born constituted a disproportionate share of the increase in the labor force—nearly half. Indeed, among some age groups, occupations, and geographic regions, the share of the expansion contributed by the foreign born was extremely large. As a result, the foreign born have come to play an increasingly important role in the U.S. economy. ☐

Notes

[1] The foreign-born population, although primarily comprised of legally admitted immigrants, includes refugees, temporary residents such as students and temporary workers, and undocumented immigrants. "Natives" are persons born in the United States, Puerto Rico, or an outlying area of the United States such as Guam or the U.S. Virgin Islands, and persons who were born in a foreign country but who had at least one parent who was a U.S. citizen. All others are "foreign born."

[2] In response to the increased demand for statistical information about the foreign born, questions on nativity, citizenship, year of entry, and parental nativity were added to the Current Population Survey (CPS) beginning in January 1994. Prior to 1994, the decennial census, two CPS Supplements (in April 1983 and November 1989) and, to some extent, the Immigration and Naturalization Service (INS) that collects information about legally admitted immigrants and nonimmigrants, were the primary data sources on the foreign born. See A. Dianne Schmidley and J. Gregory Robinson, "How well does the Current Population Survey measure the foreign-born population in the United States?" Technical working paper No. 22, (U.S. Bureau of the Census, April 1998), p. 1.

[3] Because data for 1994 and 1995 are not strictly comparable with data for 1996 and subsequent years, for this study, only data collected since 1996 are used. See Schmidley and Robinson, "How well does ...?".

[4] People of Hispanic origin may be of any race including white, black, Asian and some other race. For most BLS programs, the practice is not to exclude persons of Hispanic origin from the white and black population groups.

[5] See Ryan T. Helwig, Randy E. Ilg, and Sandra L. Mason, "Expansion of the Current Population Survey Sample Effective July 2001," *Employment and Earnings* (Bureau of Labor Statistics, August 2001). Data prior to 1996 are from Public-Use Microdata Samples (PUMS) of the Census Bureau.

[6] For a more detailed discussion on the brief history of immigration and migration, see Howard Hayghe, Abraham Mosisa, and Terence McMenamin, "Counting Minorities: A Brief History and a Look at the Future," *Report on the American Workforce* (U.S. Department of Labor, 2001), chapter 1.

[7] See Timothy J. Hatton, and Jeffrey G. Williamson, "The Age of Mass Migration," (Oxford University Press, New York, 1998), pp. 7–17.

[8] In 1879, the first immigration restriction law aimed at a particular nationality was passed by the U.S. Congress. The Fifteen Passenger Bill limited the number of Chinese passengers on any ship entering the United States to fifteen. But, because it would have violated the 1868 Burlingame-Seward treaty between the United States and China, which recognized the rights of their respective citizens to emigrate, it was vetoed. In 1880, however, a new agreement was signed between America and China called the Angell Treaty that allowed the United States to limit Chinese immigration. Two years later, the Chinese Exclusion Act was signed, barring Chinese laborers from immigrating to the United States for ten years. It was renewed in 1892, again in 1902, and, in 1904, was renewed for an indefinite length of time. The passage of this act paved the way for further restrictive legislation affecting not only Asians, but Europeans as well.

[9] Anti-Catholic sentiments began to emerge, followed by major movements endorsing the limitation of immigration among certain groups. A fact-finding commission was established and it published a report in 1911, lamenting the gradual shift in the sources of immigration away from northwestern and toward southern and eastern Europe, perceiving it as a decline in immigrant quality, for example, lack of financial resources, good health, or sponsorship by relatives already in the country.

[10] Usual weekly earnings data represent earnings before taxes and other deductions, and include any overtime pay, commissions, or tips usually received (at the main job in the case of multiple jobholders). Earnings reported on a basis other than weekly (for example, annual, monthly, hourly) are converted to weekly. Data refer to wage and salary workers (excluding self-employed persons who respond that their businesses were incorporated) who usually work full time on their sole or primary job. The comparison of earnings of the foreign born and native born is difficult, given that median weekly earnings data here exclude self-employed workers. Several researchers of immigration observe that a larger proportion of the foreign born are self-employed compared with the native born. Thus, caution should be exercised in interpreting the outcomes due to excluding self-employed workers from median weekly earnings.

[11] This section compares median weekly earnings for persons with different levels of education. No attempts were made to correct other differences between different educational records such as quality of education, type of degrees earned, and other unobservable differences. Thus, caution should be exercised in interpreting outcomes as being entirely due to differences in education.

[12] The share of the foreign born in the labor force change may be even higher. For example, estimates for the CPS show 28.8 million foreign born in 2000, while data from the Census 2000 supplementary survey universe show 30.5 million. Moreover, based on Demographic Analysis (DA) by the U.S. Bureau of the Census, the Census Level Undercoverage rate for the foreign-born population ranges from 3.3 percent to 6.7 percent in 2000. The undercoverage rate differed by migrant status: 35 percent for temporary migrants, 12.5 percent for unauthorized migrants, and 2 percent for legal migrants. See Gregory J. Robinson, *ESCAP II: Demographic Analysis Results*, P.A.–12, Report No. 1 (U.S. Bureau of the Census, October 13, 2001).

[13] The following is a listing of states for each region: New England (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont); Middle Atlantic (New Jersey, New York, Pennsylvania); South Atlantic (Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia); East South Central (Alabama, Kentucky, Mississippi, Tennessee); West South Central (Arkansas, Louisiana, Oklahoma, Texas); East North Central (Illinois, Indiana, Michigan, Ohio, Wisconsin); West North Central (Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota); Mountain (Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming); Pacific (Alaska, California, Hawaii, Oregon, Washington).

[14] A long literature exists in the disciplines of economics, sociology, and urban planning that speaks to the issue of "ethnic enclaves." Some scholars believe such groupings to be detrimental to the newcomers, whom it can effectively prevent from assimilating into the larger society; while others believe the enclave can provide opportunities to newcomers that might not otherwise accrue to them in their new home.

A century of change: the U.S. labor force, 1950–2050

With slower growth, aging, and increasing diversity, the profile of the U.S. labor force is undergoing a gradual, but significant, change

Mitra Toossi

The history of the U.S. labor force is a story of dramatic change. The rippling effects of the massive demographic changes that occurred within the U.S. population over the latter part of the 20th century will create further changes in the first half of the 21st century. The labor force—the number of people working or looking for work—is a dynamic concept that demonstrates the net impact of all demographic, social, political, and historical forces affecting a population. The growth of the labor force is one of the main ingredients of economic growth and prosperity.

This article profiles and projects U.S. labor force trends for a period of 100 years, from 1950 to 2050, on a decennial basis. Changes in both growth rates of the population and labor force participation rates have created a steadily growing labor force that, compared with 1950, is today older, more diversified, and increasingly made up of women. The same forces that have influenced the size and composition of the U.S. labor force over the past 50 years are expected to shape the future of the workforce as well. Some of the key findings emanating from the research upon which the article is based are as follows:

- *Slowdown in growth of the labor force.* The high growth rate of the civilian labor force[1] in the last 50 years will be replaced by much lower growth rates in the next 50 years. The civilian labor force was 62 million in 1950 and grew to 141 million in 2000, an increase of nearly 79 million, or an annual growth rate of 1.6 percent per year, between 1950 and 2000. It is projected that the labor force will reach 192 million in 2050, an increase of 51 million, or a growth rate of 0.6 percent annually, between 2000 and 2050. (See table 1.)
- *Changes in gender structure of the labor force.* Women in the labor force increased their numbers at an extremely rapid pace in the past 50 years. It is anticipated that their labor force growth will slow markedly in the next 50 years. The factor most responsible for the earlier high growth rate was the rapid increase in the labor force participation rate of women, which stood at 34 percent in 1950 and increased to 60 percent by 2000. The number of women in the labor force rose from 18 million in 1950 to 66 million in 2000, an annual growth rate of 2.6 percent. The share of women in the labor force grew from 30 percent in 1950 to almost 47 percent in 2000, and the number of working women is projected to reach 92 million by 2050—on the basis of an annual growth rate of 0.7 percent. That same year, women's share of the workforce is expected to be nearly 48 percent.
- *Changes in the age structure of the labor force.* With the aging of the baby-boom generation, the older age cohorts are expected to make up a larger proportion of the labor force in the next two decades. The 55-and-older age group, which made up 13 percent of the labor force in 2000, is projected to increase to 20 percent by 2020. It is anticipated that, by 2050, the group will make up 19 percent of the labor force.
- *Changes in the racial and ethnic composition of the labor force.* The labor force is expected to become more diverse. With higher

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Table 1 Civilian labor force by sex, age, race, and Hispanic origin, 1950, 2000, and projected, 2050

[Numbers in thousands]

Group	Level (in thousands)			Change		Percent change		Percent distribution			Annual growth rate (percent)	
	1950	2000	2050	1950–2000	2000–50	1950–2000	2000–50	1950	2000	2050	1950–2000	2000–50
Total, 16 years and older	62,208	140,863	191,825	78,655	50,961	126.4	36.2	100.0	100.0	100.0	1.6	0.6
Men	43,819	75,247	100,280	31,428	25,033	71.7	33.3	70.4	53.4	52.3	1.1	.6
Women	18,389	65,616	91,545	47,227	25,928	256.8	39.5	29.6	46.6	47.7	2.6	.7
16 to 24	11,522	22,715	31,317	11,193	8,602	97.1	37.9	18.5	16.1	16.3	1.4	.6
25 to 54	40,017	99,974	124,443	59,957	24,469	149.8	24.5	64.3	71.0	64.9	1.8	.4
55 and older	10,669	18,175	36,065	7,506	17,891	70.3	98.4	17.2	12.9	18.8	1.1	1.4
White	—	117,574	143,770	...	26,196	...	22.3	...	83.5	74.9	...	.4
Black	—	16,603	27,094	...	10,491	...	63.2	...	11.8	14.1	...	1.0
Asian and other[1]	—	6,687	20,960	...	14,274	...	213.5	...	4.7	10.9	...	2.3
Hispanic origin	—	15,368	45,426	...	30,058	...	195.6	...	10.9	23.7	...	2.2
Other than Hispanic origin	—	125,495	146,399	...	20,903	...	16.7	...	89.1	76.3	...	.3
White non-Hispanic	—	102,963	102,506	...	(457)		–.4	...	73.1	53.4	...	.0

[1] The "Asian and other" group includes (1) Asians and Pacific Islanders and (2) American Indians and Alaska Natives. The historical data are derived by subtracting "black" and "white" from the total; projections are made directly, not by subtraction.

NOTE: Dash indicates data not available.

population growth and increasing participation rates, the share of minorities in the workforce is projected to expand substantially. The share of white non-Hispanics is anticipated to decrease from 73 percent in 2000 to 53 percent in 2050. Over the same period, Hispanics are expected to more than double their share, from 11 percent in 2000 to 24 percent of the labor force in 2050. Blacks also are expected to increase their share, from 12 percent in 2000 to 14 percent in 2050. Asians, the fastest-growing group in the labor force, are projected to increase their share from 5 percent to 11 percent between 2000 and 2050.

The Bureau of Labor Statistics (BLS, the Bureau) publishes medium-term, or 10-year, labor force projections every 2 years. The latest ones covered the 2000–10 period.[2] The projections presented in this article provide a longer term perspective on the labor force by looking 50 years ahead. As in the decade-long projection,[3] the projected labor force is a product of two factors: the size and growth of the population by age, sex, race, and ethnicity and the future trend of labor force participation rates for various age, sex, race, and ethnicity groups.

The Current Population Survey (CPS)[4] is the source of historical data on the civilian noninstitutional population and the labor force. The population projections and the CPS are based on estimates of births, deaths, and net immigration since the most recent decennial census. The estimates are benchmarked to the census results. Because population projections based on the 2000 census are not yet available, the Census Bureau's population projections used in this article still reflect the 1990 census.[5]

Future labor force participation rates for 136 different groups, including both genders, 17 age groups, and 4 race and ethnicity groups, are estimated on the basis of the labor force participation behavior of each group in the past. (See box.) By applying the projected labor force participation rates of each group to the projected population of that group, the size of the labor force is estimated, both for detailed categories and for the economy as a whole.

Population growth and the changes in participation rates are the main determinants of labor force growth. Table 2 presents the growth rates of the civilian noninstitutional population,[6] the labor force participation rate,[7] and the civilian labor force during the 100 years examined. As the rate of change in labor force participation decreases, more of the growth rate of the labor force is accounted for by the growth rate of the population.

In the 1950–60 period, population growth alone was responsible for the growth of the labor force. During the 1960–70 period, population growth contributed about 94 percent of the growth in the labor force. In the 1970–80 period, when the labor force participation of women underwent rapid growth, 76 percent of the labor force growth was the result of population growth, and the rest was related to the growth of participation rates, mainly of women.[8] From 2000 to 2050, with the expected overall decline in the participation rate, participation growth is projected to exert even less influence, and the growth of the labor force will likely be due mostly to the impact of population growth.

In what follows, the analysis begins with a discussion of the major factors that have affected the trend of the labor force in the past 50 years and their implications for future labor force change: (1) different birth patterns in the U.S. population during the previous 50 years; (2) the extremely rapid growth in the participation rate of women; and (3) the growing racial and ethnic diversity of the labor force. Then the results of the long-term labor force projection are pre-

Methodology used for the long-term labor force projections

Projections of labor force participation rates for each age, sex, race, and ethnicity group are developed initially by extrapolating trends, usually on the basis of participation behavior during the previous 7 years. Then, the resulting participation rates are modified when the projection for a specific labor force group is inconsistent with the results of cross-sectional and cohort analysis. This step ensures consistency in the projections across the various demographic groups. Finally, the projected labor force participation rates are applied to the population projections, producing a labor force projection for each of the different age, sex, race, and ethnicity categories. (For further information, see "Employment Projections," in *Handbook of Methods* (Bureau of Labor Statistics, 1999), Chapter 13.)

Labor force participation rates for the various sex, age, racial, and ethnic categories were projected, as just described, to the year 2015 and were held constant thereafter. In similar long-term projections of the labor force, the change in participation rates for various age and sex groups, usually based on their past behavior, is often assumed to approach zero beyond a certain point in the projection horizon. This assumption is due to uncertainties associated with long-term change in factors affecting the decision to participate in the labor force. Still, despite the fact that detailed participation rates for various population categories are expected to be constant, the overall labor force participation rate is projected to change through 2050. This overall mutability reflects the impact of changes in the relative sizes of the various sex, age, race, and ethnic groups, each of which can have different levels of participation.

sented. Finally, two other important concepts in the study of the labor force—the median age and economic dependency—are discussed in light of the changes in the composition of the labor force.

Major factors affecting labor force change

Population: birth patterns. A number of distinct birth patterns evolved in the population of the United States in the last century that led to similar labor force patterns as the various cohorts[9] reached 16 years of age and joined the workforce. These demographic patterns can be traced chronologically as follows:

- *Birth dearth*: the decline in the number of births between the late 1920s and early 1930s.
- *Baby boom*: the significant increase in the number of births between 1946 and 1964, with the peak birth year being 1957.
- *Baby bust*: a decrease in the number of births occurring between the end of the baby boom and the late 1970s.
- *Baby-boom echo* or *baby boomlet*: a growth in the number of children born to the baby-boom generation during the 1980s and early 1990s.

The effect of the foregoing demographic events can be seen in table 3, which shows the civilian noninstitutional population, by sex, race, age, and Hispanic origin, from 1950 to 2050.

The *birth dearth* can be seen in the decrease of a million people in the 25–34 age group during the 1950–60 period and a corresponding drop of 948,000 people in the 35–44 age group in the 1960–70 period. The same diminution in births can be further traced through succeeding decades as this cohort ages. The *baby boom* can be traced to the increase of nearly 9.4 million people in the 16–24 age group during the 1960–70 period and 7.3 million in the 1970–80 period. This increase in births can again be seen in the 25–34 age group a decade later, during the 1970–80 period. The *baby bust* is reflected by the decrease of nearly 3.8 million in the 16–24 age group during the 1980–90 period. The same impact can be seen in succeeding decades in older age groups. The *baby-boom echo* also can be seen in the increase of more than a million people in the 16–24 age group during the 1990–2000 period.

These distinct birth patterns can be traced as well in the shape of the population and labor force pyramids in three snapshots for 1950, 2000, and 2050. The birth dearth can be clearly seen in the indentation of the bar representing those in the 15–19 age group in the population pyramid of the 1950s. (See chart 1, top panel.) The surge in the births of the early baby-boom generation is reflected in the extended length of the bar corresponding to the 0–4 age group in 1950.

The middle panel of chart 1 shows the population and labor force pyramid for 2000. The birth dearth of the late 1920s and early 1930s is visible in the 65–69 age group. The swelling at the 35–54 age group in the population pyramid clearly shows the share of the baby boomers in the total population in 2000. The baby bust is visible as the indentation of the bar representing the 25–29 age group. The baby-boom echo is reflected in the bulge of the 15–19 age group of the population.

The bottom panel of chart 1 shows the projected population pyramid in 2050. It is expected that, in that year, the baby boomers will be concentrated primarily in the 85-and-older age category of the population, represented by relatively longer bars, especially for women, compared with bars representing previous population cohorts. The pyramid of 2050 looks rectangular in shape in the higher age brackets, indicative of the swelling population of aging baby boomers.

The baby bust is reflected in 2050 as the indentation of the bars corresponding to the 80–84 age group of the population. The baby-boom echo is seen as the bulge in the 65–69 age group. A comparative look at the three population pyramids shows how their shapes have changed as a result of alterations in the sex and age composition of the population over the entire 100-year period. In addition, the effect that mortality differentials have on the composition of the population during the century under examination is worth noting: women's tendency to exhibit lower mortality rates than men within specific age cohorts is visible in both tables for 2000 and 2050, especially in the older age groups.

Labor force participation: rapid growth of the participation rates of women. Among the factors that have contributed to the growth and development of the U.S. labor force, none has been as pronounced as the rise in the participation of women in the labor force. In the two decades after World War II, the U.S. economy enjoyed a major expansion, coupled with increases in productivity, higher standards of living, and rapid acceleration in the growth of college enrollments.[10] Rapid economic growth vastly increased the demand for labor. The civil rights movement, legislation promoting equal opportunity in employment, and the women's rights movement created an atmosphere that was hospitable to more women working outside the home. The combination of all of these factors created strong inducements for women to join the workforce, significantly affecting their participation rate.

The dramatic increase in the labor force participation rates of women during the period was accompanied by many other social, economic, and demographic changes in the status of women:

- Women remained single more often.
- Of those who married, many did so later in life, and the median age at first marriage increased substantially.
- Women elected to stay in school longer, achieving higher educational attainment than in the past and pursuing better paying careers.
- Women postponed childbirth to older ages and had fewer children than in previous decades. As a result of improved child care, women tended to enter the labor force even before their children started school, and they were able to maintain a longer job tenure than in previous periods.
- Women got divorced more often; this in itself increased their labor force participation rate.[11]

In 1950, the overall participation rate of women was 34 percent. (See table 4.) The rate rose to 38 percent in 1960, 43 percent in 1970, 52 percent in 1980, and 58 percent in 1990 and reached 60 percent by 2000. The overall labor force participation rate of women is projected to attain its highest level in 2010, at 62 percent. From then on, it is anticipated to decline slowly, falling to 57 percent in 2050. The projected decline after 2010 is due to the assumption that changes in participation rates will approach zero by 2015, combined with the gradual movement of an aging female labor force into age groups that traditionally have lower participation rates.

Between 1970 and 1980, the labor force participation rates of women in the 25–34 and 35–44 age groups increased by 20.5 percentage points and 14.4 percentage points, respectively. No other labor force group has ever experienced an increase in participation rates of this magnitude in one decade. During the same period, the participation rate of women in the 16–24 age group increased by 10.6 percentage points. From 1980 to 1990, the participation rate for women in the 35–44 age group increased by 11.0 percentage points, and the rate for women in the 45–54 age group increased by 11.3 percentage points. The Bureau projects that after 2010, the participation rates for three age groups—25–34, 35–44, and 45–

Table 2. Annual growth rates of the civilian noninstitutional population, civilian labor force, and civilian labor force participation rate, 1950 to 2000, and projected, 2000 to 2050

[In percent]

Category	1950–60	1960–70	1970–80	1980–90	1990–2000	2000–10	2010–15	2015–20	2020–30	2030–40	2040–2050
Population growth	1.10	1.60	2.00	1.20	1.00	1.10	0.80	0.80	0.80	0.70	0.60
Participation growth	.03	.16	.54	.40	.12	.05	−.20	−.53	−.43	−.11	−.02
Interaction[1]	−.03	−.06	.06	.00	−.02	−.05	.00	−.07	−.07	.01	.02
Labor force growth	1.10	1.70	2.60	1.60	1.10	1.10	.60	.20	.30	.60	.60

[1] Interaction measures the effect of the labor force participation rates on the changing composition of the labor force (its age structure and racial and Hispanic makeup). Interaction is the labor force growth that is not accounted for by growth in the aggregate population and aggregate labor force participation rate.

Table 3 Civilian noninstitutional population by sex, age, race, and Hispanic origin, 1950–2000 and projected, 2010–50

Group	1950	1960	1970	1980	1990	2000	2010	2015	2020	2030	2040	2050
Level												
Total, 16 years and older	104,995	117,245	137,085	167,745	189,164	209,699	233,658	243,591	253,069	272,956	292,891	312,372
Men	50,725	55,662	64,304	79,398	90,377	100,731	112,319	117,088	121,569	130,937	140,454	150,067
Women	54,270	61,582	72,782	88,348	98,787	108,968	121,338	126,503	131,500	142,019	152,436	162,304
16 to 24	19,223	20,460	29,841	37,178	33,421	34,453	39,201	39,047	38,550	41,709	45,177	47,780
25 to 34	23,013	21,998	24,435	36,558	42,976	37,417	39,287	41,628	43,129	43,192	47,022	50,596
35 to 44	20,681	23,437	22,489	25,578	37,719	44,605	39,535	38,874	40,767	45,087	45,596	49,487
45 to 54	17,240	20,601	23,059	22,563	25,081	36,905	43,894	41,728	38,594	40,088	44,617	45,136
55 to 64	13,469	15,409	18,250	21,520	20,720	23,615	34,846	39,303	41,472	36,697	38,497	42,987
65 and older	11,363	15,336	19,007	24,350	29,247	32,705	36,895	43,012	50,557	66,183	71,982	76,385
White	–	–	–	146,122	160,625	174,428	189,512	195,745	201,452	212,810	223,707	234,046
Black	–	–	–	17,824	21,477	25,218	29,877	31,750	33,625	37,691	41,589	45,333
Asian and other[1]	–	–	–	3,801	7,061	10,054	14,269	16,096	17,992	22,454	27,594	32,992
Hispanic origin	–	–	–	9,598	15,904	22,393	30,359	34,439	38,793	48,543	59,447	71,196
Other than Hispanic origin	–	–	–	158,147	173,260	187,306	203,298	209,152	214,276	224,413	233,444	241,175
White non-Hispanic	–	–	–	136,847	146,535	153,111	162,064	164,579	166,313	168,787	169,742	169,355
Age of baby-boom generation	0 to 4	0 to 14	6 to 24	16 to 34	26 to 44	36 to 54	46 to 64	51 to 69	56 to 74	66 to 84	76 to 94	86 to 104
Share (percent)												
Total, 16 years and older	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Men	48.3	47.5	46.9	47.3	47.8	48.0	48.1	48.1	48.0	48.0	48.0	48.0
Women	51.7	52.5	53.1	52.7	52.2	52.0	51.9	51.9	52.0	52.0	52.0	52.0
16 to 24	18.3	17.5	21.8	22.2	17.7	16.4	16.8	16.0	15.2	15.3	15.4	15.3
25 to 34	21.9	18.8	17.8	21.8	22.7	17.8	16.8	17.1	17.0	15.8	16.1	16.2
35 to 44	19.7	20.0	16.4	15.2	19.9	21.3	16.9	16.0	16.1	16.5	15.6	15.8
45 to 54	16.4	17.6	16.8	13.5	13.3	17.6	18.8	17.1	15.3	14.7	15.2	14.4
55 to 64	12.8	13.1	13.3	12.8	11.0	11.3	14.9	16.1	16.4	13.4	13.1	13.8
65 and older	10.8	13.1	13.9	14.5	15.5	15.6	15.8	17.7	20.0	24.2	24.6	24.5
White	–	–	–	87.1	84.9	83.2	81.1	80.4	79.6	78.0	76.4	74.9
Black	–	–	–	10.6	11.4	12.0	12.8	13.0	13.3	13.8	14.2	14.5
Asian and other[1]	–	–	–	2.3	3.7	4.8	6.1	6.6	7.1	8.2	9.4	10.6
Hispanic origin	–	–	–	5.7	8.4	10.7	13.0	14.1	15.3	17.8	20.3	22.8
Other than Hispanic origin	–	–	–	94.3	91.6	89.3	87.0	85.9	84.7	82.2	79.7	77.2
White non-Hispanic	–	–	–	81.6	77.5	73.0	69.4	67.6	65.7	61.8	58.0	54.2
Change (thousands)		1950–60	1960–70	1970–80	1980–90	1990–2000	2000–10	2010–15	2015–20	2020–30	2030–40	2040–50
Total, 16 years and older		12,250	19,840	30,660	21,419	20,535	23,959	9,933	9,478	19,887	19,934	19,481
Men		4,937	8,642	15,094	10,979	10,354	11,588	4,769	4,481	9,367	9,518	9,613
Women		7,312	11,200	15,566	10,439	10,181	12,370	5,164	4,997	10,519	10,417	9,868
16 to 24		1,237	9,381	7,337	–3,757	1,032	4,749	–154	–497	3,159	3,467	2,603
25 to 34		–1,015	2,437	12,123	6,418	–5,559	1,870	2,341	1,501	64	3,830	3,574
35 to 44		2,756	–948	3,089	12,141	6,886	–5,070	–662	1,893	4,320	509	3,892
45 to 54		3,361	2,458	–496	2,518	11,824	6,989	–2,166	–3,134	1,494	4,529	519
55 to 64		1,940	2,841	3,270	–800	2,895	11,231	4,457	2,170	–4,775	1,800	4,490
65 and older		3,973	3,671	5,343	4,897	3,458	4,190	6,117	7,545	15,626	5,800	4,403
White		…	…	…	14,503	13,803	15,083	6,233	5,707	11,358	10,897	10,339
Black		…	…	…	3,653	3,741	4,659	1,874	1,875	4,066	3,898	3,744
Asian and other[1]		…	…	…	3,260	2,993	4,215	1,827	1,896	4,462	5,140	5,398
Hispanic origin		…	…	…	6,306	6,489	7,966	4,080	4,354	9,750	10,903	11,750
Other than Hispanic origin		…	…	…	15,113	14,046	15,993	5,854	5,124	10,137	9,031	7,731
White non-Hispanic		…	…	…	9,687	6,576	8,953	2,515	1,734	2,473	955	–387

Table 3 **Continued—Civilian noninstitutional population by sex, age, race, and Hispanic origin, 1950–2000 and projected, 2010–50**

Group	1950–60	1960–70	1970–80	1980–90	1990–2000	2000–10	2010–15	2015–20	2020–30	2030–40	2040–50
Annual growth (percent)											
Total, 16 years and older	1.1	1.6	2.0	1.2	1.0	1.1	.8	.8	.8	.7	.6
Men	.9	1.5	2.1	1.3	1.1	1.1	.8	.8	.7	.7	.7
Women	1.3	1.7	2.0	1.1	1.0	1.1	.8	.8	.8	.7	.6
16 to 24	.6	3.8	2.2	–1.1	.3	1.3	–.1	–.3	.8	.8	.6
25 to 34	–.5	1.1	4.1	1.6	–1.4	.5	1.2	.7	.0	.9	.7
35 to 44	1.3	–.4	1.3	4.0	1.7	–1.2	–.3	1.0	1.0	.1	.8
45 to 54	1.8	1.1	–.2	1.1	3.9	1.7	–1.0	–1.5	.4	1.1	.1
55 to 64	1.4	1.7	1.7	–.4	1.3	4.0	2.4	1.1	–1.2	.5	1.1
65 and older	3.0	2.2	2.5	1.8	1.1	1.2	3.1	3.3	2.7	.8	.6
White	---	---	---	1.0	.8	.8	.6	.6	.5	.5	.5
Black	---	---	---	1.9	1.6	1.7	1.2	1.2	1.1	1.0	.9
Asian and other[1]	---	---	---	6.4	3.6	3.6	2.4	2.3	2.2	2.1	1.8
Hispanic origin	---	---	---	5.2	3.5	3.1	2.6	2.4	2.3	2.0	1.8
Other than Hispanic origin	---	---	---	.9	.8	.8	.6	.5	.5	.4	.3
White non-Hispanic	---	---	---	.7	.4	.6	.3	.2	.1	.1	.0

[1] The "Asian and other" group includes (1) Asians and Pacific Islanders and (2) American Indians and Alaska Natives. Historical data are derived by subtracting "black" from the "black and other" group; projections are made directly, not by subtraction.

NOTE: Dash indicates data not available.

54—will remain above the 80-percent mark through 2050.

The difference between the participation rates of men and women has been decreasing steadily between 1950 and 2000, and the Bureau expects this narrowing to continue into the future. As table 4 demonstrates, the difference between the participation rates of men and women was 53 percentage points in 1950, decreasing to 46 percentage points in 1960. In 1970, the difference was reduced even further, to 36 percentage points. In 1980 and 1990, the difference was 26 percentage points and 19 percentage points, respectively. In 2000, the difference was 15 percentage points. It is projected that, during the 2000–50 period, the men-women participation rate difference will decrease even further, to about 10 percentage points in 2050. (See chart 2.)

Diversity. During the last 50 years of the 20th century, the U.S. population grew more and more racially and ethnically diverse. The greater diversity of the population resulted in an increased diversity in the labor force. Following the standards provided in the Office of Management and Budget's Statistical Policy Directive No. 15, this article divides the population and the labor force into four major racial categories: "white," "black," "American Indian and Alaska Native," and "Asian and Pacific Islander."[12] The Office of Management and Budget also recognizes two ethnic groups: "Hispanic origin" and "not of Hispanic origin." Although Hispanics can be of any race, most report that they are white. Data on race and ethnicity are based on self-reports or self-identification.

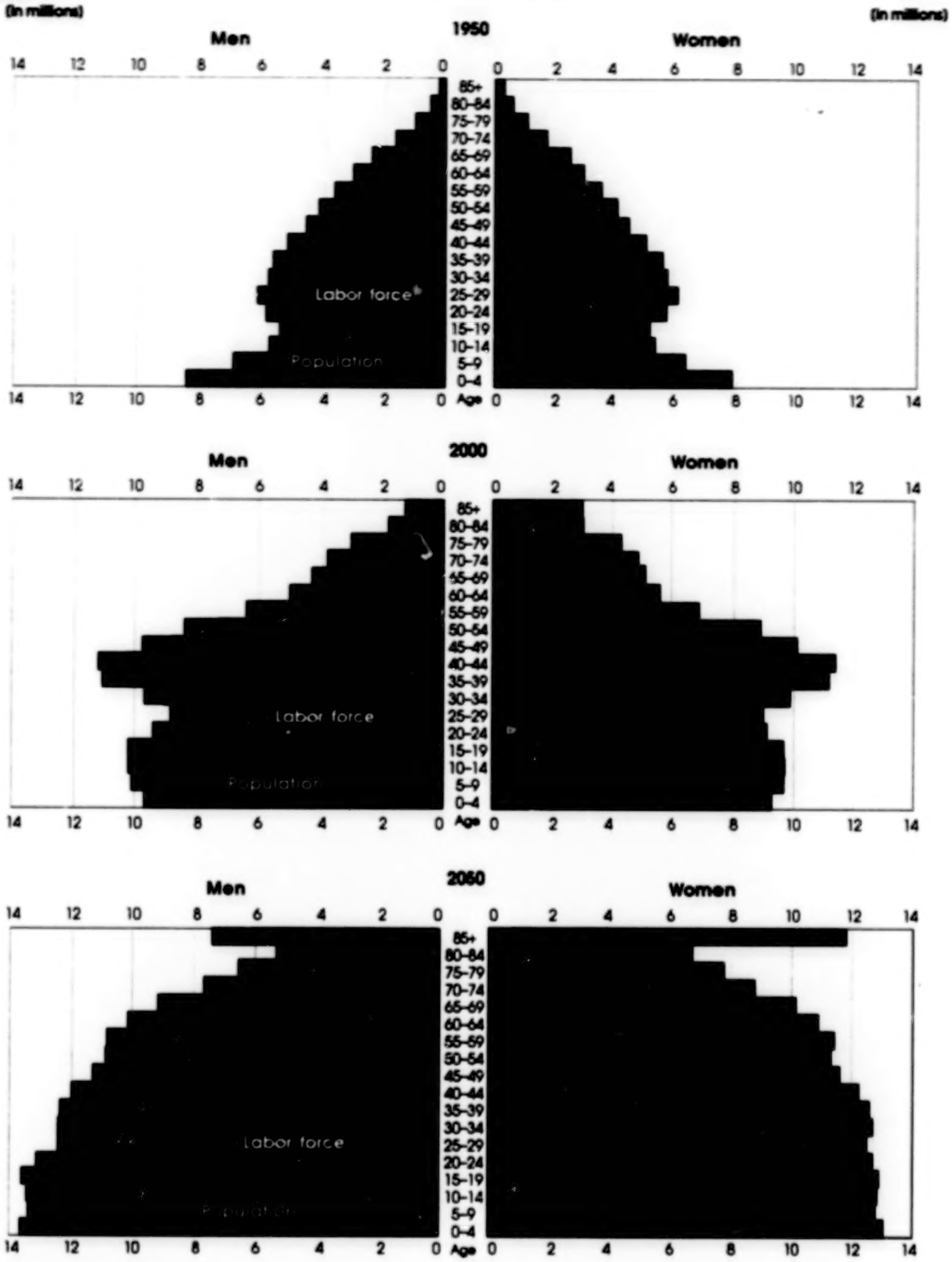
Immigration has been the major source of growing diversity. Most immigrants come to the United States seeking better job opportunities and higher wages. They tend to be in younger age groups with higher labor force participation rates. Because many come from high-fertility societies, they have considerably higher fertility rates than those of the resident population, and this factor has contributed in large part to the growing diversity of the U.S. population and labor force.

In 1980, the first year data were available on both race and Hispanic origin, the total civilian noninstitutional population aged 16 years and older consisted of 87 percent whites (of which 82 percent were non-Hispanic whites), 11 percent blacks, and 2 percent Asians and others. (See table 3.) In 2000, the share of whites had fallen to 83 percent (with the share of non-Hispanic whites declining to 73 percent), while the share of the black population rose to 12 percent and the share of Asians and others jumped to 5 percent. The share of Hispanics, which was 6 percent in 1980, soared to 11 percent by 2000. It is projected that the share of Hispanics will reach 13 percent of the population in 2010 and 23 percent in 2050.

The shares of the various race and ethnicity groups in the civilian noninstitutional population are projected to change significantly between 2000 and 2050:

- White non-Hispanics are expected to slowly decrease their share, to make up 54 percent of the civilian noninstitutional

Chart 1. U.S. population and labor force, 1950, 2000, and projected, 2050



SOURCE: Bureau of Labor Statistics.

Table 4. **Civilian labor force participation rates by sex and age, 1950–2000 and projected, 2010–50**

Group	1950	1960	1970	1980	1990	2000	2010	2015	2020	2030	2040	2050
Percent												
Total, 16 years and older	59.2	59.4	60.4	63.8	66.4	67.2	67.5	66.8	65.1	62.3	61.6	61.5
16 to 24	59.9	56.4	59.8	68.1	67.3	65.9	66.5	67.1	66.5	66.0	65.9	65.5
25 to 34	63.5	65.4	69.7	79.9	83.6	84.6	87.1	88.0	87.9	87.6	87.4	87.3
35 to 44	67.5	69.4	73.1	80.0	85.2	84.8	86.0	86.6	86.5	86.4	86.3	86.2
45 to 54	66.4	72.2	73.5	74.9	80.7	82.6	83.8	84.1	84.0	83.9	83.7	83.4
55 to 64	56.7	60.9	61.8	55.7	55.9	59.2	60.9	61.6	60.8	60.1	60.7	60.3
65 and older	26.7	20.8	17.0	12.5	11.8	12.8	14.8	16.2	16.3	15.2	13.3	13.4
Men	86.4	83.3	79.7	77.4	76.1	74.7	73.2	71.9	70.3	67.6	67.0	66.8
16 to 24	77.3	71.7	69.4	74.4	71.5	68.6	67.9	68.2	67.6	67.2	67.3	67.0
25 to 34	96.0	97.5	96.4	95.2	94.2	93.4	93.1	93.0	93.0	93.0	92.9	93.0
35 to 44	97.6	97.7	96.8	95.5	94.4	92.6	92.3	92.2	92.2	92.1	92.1	92.1
45 to 54	95.8	95.7	94.3	91.2	90.7	88.6	87.8	87.3	87.3	87.3	87.1	87.1
55 to 64	86.9	87.3	83.0	72.1	67.7	67.3	67.0	66.8	66.1	65.7	66.5	66.2
65 and older	45.8	33.1	26.8	19.0	16.4	17.5	19.5	21.0	21.0	19.6	17.3	17.3
Women	33.9	37.7	43.3	51.5	57.5	60.2	62.2	62.1	60.3	57.4	56.7	56.6
16 to 24	43.9	42.8	51.3	61.9	63.1	63.2	65.1	66.1	65.4	64.8	64.6	64.0
25 to 34	34.0	36.0	45.0	65.5	73.6	76.3	81.4	83.3	83.0	82.4	82.1	81.9
35 to 44	39.1	43.4	51.1	65.5	76.5	77.3	80.0	81.2	81.1	81.0	80.7	80.5
45 to 54	37.9	49.9	54.4	59.9	71.2	76.8	80.0	81.1	80.8	80.7	80.4	79.9
55 to 64	27.0	37.2	43.0	41.3	45.3	51.8	55.2	56.7	55.8	54.9	55.3	54.7
65 and older	9.7	10.8	9.7	8.1	8.7	9.4	11.1	12.5	12.6	11.7	10.1	10.1
White	–	–	–	64.1	66.8	67.4	67.6	66.8	65.0	62.1	61.5	61.4
Black	–	–	–	61.0	63.3	65.8	67.1	66.6	65.0	62.1	60.9	59.8
Asian and other[1]	–	–	–	64.6	65.4	66.5	67.5	67.4	66.4	64.9	64.2	64.9
Hispanic origin	–	–	–	64.0	67.0	68.6	69.0	69.1	67.9	65.8	64.6	63.8
Other than Hispanic origin	–	–	63.7	66.3	67.0	67.3	66.5	64.6	61.8	60.9	60.9	
White non-Hispanic	–	–	–	64.0	66.8	67.2	67.3	66.4	64.4	61.1	60.5	60.5
Age of baby-boom generation	0–4	0–14	6–24	16–34	26–44	36–54	46–64	51–69	56–74	66–84	76–94	86–104
Difference between men's and women's labor force participation rates												
Total, 16 and older	52.5	45.6	36.3	25.9	18.6	14.5	11.0	9.8	10.0	10.1	10.2	10.2
16 to 24	33.4	28.8	18.1	12.5	8.4	5.4	2.8	2.0	2.2	2.4	2.7	3.0
25 to 34	62.0	61.5	51.4	29.7	20.5	17.0	11.7	9.8	10.0	10.6	10.8	11.1
35 to 44	58.5	54.3	45.7	30.0	18.0	15.4	12.3	10.9	11.1	11.1	11.5	11.5
45 to 54	57.9	45.8	39.9	31.3	19.5	11.8	7.8	6.2	6.4	6.6	6.7	7.1
55 to 64	59.9	50.1	39.9	30.8	22.4	15.5	11.7	10.1	10.2	10.8	11.2	11.5
65 and older	36.1	22.3	17.1	10.9	7.7	8.1	8.4	8.5	8.5	8.0	7.2	7.3

Change (percentage points)	1950–60	1960–70	1970–80	1980–90	1990–2000	2000–10	2010–15	2015–20	2020–30	2030–40	2040–50
Total, 16 years and older	.2	1.0	3.4	2.8	.8	.3	–.7	–1.8	–2.8	–.7	–.1
16 to 24	–3.5	3.4	8.2	–.8	–1.4	.6	.6	–.6	–.6	.0	–.4
25 to 34	1.9	4.3	10.2	3.7	1.0	2.5	.9	–.2	–.3	–.2	–.1
35 to 44	1.9	3.7	6.9	5.2	–.4	1.1	.6	–.1	–.1	–.2	.0
45 to 54	5.8	1.3	1.4	5.8	1.8	1.2	.3	–.2	.0	–.3	–.2
55 to 64	4.2	.9	–6.1	.2	3.3	1.7	.7	–.8	–.7	.6	–.4
65 and older	–5.9	–3.8	–4.4	–.7	1.0	1.9	1.5	.1	–1.1	–1.9	.0
Men	–3.1	–3.6	–2.3	–1.3	–1.4	–1.5	–1.3	–1.6	–2.7	–.6	–.1
16 to 24	–5.6	–2.2	5.0	–2.9	–2.9	–.7	.2	–.5	–.5	.1	–.3
25 to 34	1.5	–1.1	–1.2	–1.0	–.8	–.3	–.1	.0	.0	–.1	.0
35 to 44	.1	–.9	–1.4	–1.0	–1.8	–.3	–.1	.0	–.1	.0	.0
45 to 54	–.1	–1.4	–3.1	–.5	–2.1	–.8	–.5	–.1	.0	–.2	.0
55 to 64	.4	–4.3	–10.8	–4.4	–.4	–.3	–.2	–.7	–.4	.8	–.3
65 and older	–12.7	–6.3	–7.8	–2.6	1.1	2.0	1.5	.0	–1.4	–2.3	.0
Women	3.8	5.6	8.1	6.0	2.7	2.0	–.1	–1.9	–2.8	–.7	–.2
16 to 24	–1.1	8.5	10.6	1.2	.1	1.9	1.0	–.7	–.7	–.2	–.6
25 to 34	2.0	9.0	20.5	8.2	2.7	5.1	1.9	–.3	–.6	–.3	–.3
35 to 44	4.3	7.7	14.4	11.0	0.8	2.7	1.3	–.1	–.1	–.3	–.1
45 to 54	12.0	4.5	5.5	11.3	5.6	3.2	1.1	–.2	–.1	–.3	–.4
55 to 64	10.2	5.8	–1.7	4.0	6.5	3.5	1.5	–.9	–.9	.4	–.6
65 and older	1.1	–1.1	–1.6	.6	.7	1.7	1.4	.0	–.9	–1.6	.0
White	...	...	...	2.8	.6	.2	–.7	–1.9	–2.9	–.6	0
Black	...	...	...	2.4	2.5	1.2	–.4	–1.8	–2.9	–1.2	–1.1
Asian and other[1]	...	...	...	.8	1.1	1.0	–.1	–1.0	–1.5	–.7	.7
Hispanic origin	...	...	...	2.9	1.6	.4	.1	–1.2	–2.0	–1.2	–.8
Other than Hispanic origin		...	...	2.6	.7	.3	–.8	–1.9	–3.0	–.7	.0
White non-Hispanic	...	...	...	2.8	.4	.1	–.9	–2.0	–3.3	–.6	.1

[1] The "Asian and other" group includes (1) Asians and Pacific Islanders and (2) American Indians and Alaska Natives. Historical data are derived by subtracting "black" from the "black and other" group; projections are made directly, not by subtraction.

NOTE: Dash indicates data not available.

population by 2050. The population of white non-Hispanics is actually projected to decrease between 2040 and 2050.

- The Hispanic population, which had a 5.2-percent growth rate in the 1980–90 period and a 3.5-percent growth rate in the 1990–2000 period, is projected to grow by 3.1 percent in 2000–10 and is eventually expected to make up 23 percent of the civilian noninstitutional population by 2050.
- The black population is anticipated to increase at a much lower rate in future decades than in the past, and its share is projected to constitute 15 percent of the total population by 2050.
- The "Asian and other" category is projected to grow considerably in the coming years, with its members expected to make up 10 percent of the total civilian noninstitutional population in 2050.

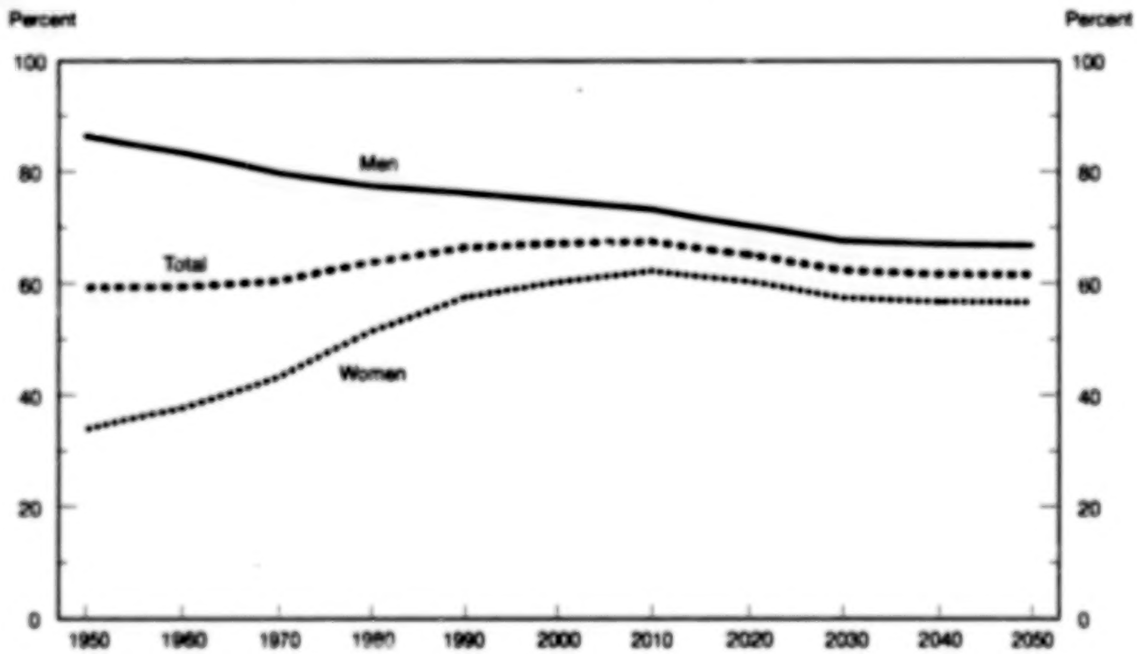
With the influx of immigrants during the last three decades, the U.S. labor force is rapidly diversifying. The new immigrants, mostly Hispanic and Asian, and in younger age groups with higher participation rates, are expected to increase the overall participation rate and diversify the labor force even further in the coming decades. (See table 4.) It is worth mentioning that the differences in the labor force participation rate by race and Hispanic origin are usually not as big as those among different age and sex groups. In 1980, the labor force participation rate was 55 percent for Asians, 64 percent for both Hispanics and white non-Hispanics, and 61 percent for blacks. It is projected that in 2050, Asians will still have the highest participation rate, 65 percent, followed by Hispanics, with 64 percent. White non-Hispanics and blacks are expected to have participation rates of 61 percent and 60 percent, respectively.

Labor force projections

During the 1950–2000 period, the annual growth rate of the labor force was 1.6 percent, whereas, from 2000 to 2050, the annual growth rate is projected to be 0.6 percent. (See table 1.) In the 1950–60 period, the labor force increased at a 1.1-percent rate, the same as that of the population. (See table 5.) During 1960–70, labor force growth increased to 1.7 percent per year, as the baby-boom generation began entering the labor force and labor force participation rates increased significantly. The annual growth rate of the labor force peaked at 2.6 percent during the 1970–80 period, due mainly to the continued absorption of the baby-boomer cohorts into the job market and the even more rapid acceleration in the participation rate of women in the workforce. In the 1980–90 period, labor force growth slowed down, because nearly all baby boomers who were to enter the labor force had already done so. The growth rate during this period decreased to 1.6 percent.

During the 1990–2000 period, the growth rate of the labor force decreased further, to 1.1 percent, a little higher than the

Aggregate labor force participation rates, 1950–2000 and projected to 2050



Source: Bureau of Labor Statistics.

Table 5. Civilian labor force by sex, age, race, and Hispanic origin, 1950–2000 and projected, 2010–50

Group	1950	1960	1970	1980	1990	2000	2010	2015	2020	2030	2040	2050
Level (thousands)												
Total, 16 years and older	62,208	69,628	82,771	106,940	125,840	140,863	157,721	162,822	164,681	170,090	180,517	191,825
Men	43,819	46,388	51,228	61,453	69,011	75,247	82,221	84,202	85,430	88,503	94,041	100,280
Women	18,389	23,240	31,543	45,487	56,829	65,616	75,500	78,620	79,250	81,588	86,476	91,545
16 to 24	11,522	11,545	17,846	25,300	22,492	22,715	26,081	26,216	25,653	27,518	29,792	31,317
25 to 34	14,619	14,382	17,036	29,227	35,929	31,669	34,222	36,651	37,905	37,828	41,099	44,156
35 to 44	13,954	16,269	16,437	20,463	32,145	37,838	33,990	33,659	35,277	38,968	39,336	42,647
45 to 54	11,444	14,852	16,949	16,910	20,248	30,467	36,783	35,108	32,406	33,644	37,330	37,640
55 to 64	7,633	9,385	11,283	11,985	11,575	13,974	21,204	24,200	25,195	22,047	23,359	25,901
65 and older	3,036	3,195	3,222	3,054	3,451	4,200	5,442	6,988	8,243	10,086	9,601	10,164
White	–	–	–	93,600	107,447	117,574	128,043	130,811	130,881	132,116	137,494	143,770
Black	–	–	–	10,865	13,740	16,603	20,041	21,158	21,856	23,399	25,316	27,094
Asian and other[1]	–	–	–	2,476	4,653	6,687	9,636	10,853	11,944	14,575	17,707	20,960
Hispanic origin	–	–	–	6,146	10,720	15,368	20,947	23,767	26,321	31,951	38,403	45,428
Other than Hispanic origin	–	–	–	100,794	115,120	125,495	136,774	139,034	138,359	138,140	142,114	146,399
White non-Hispanic	–	–	–	87,633	97,818	102,963	109,118	109,294	107,043	103,138	102,637	102,506
Age of baby-boom generation	0–4	0–14	6–24	16–34	26–44	36–54	46–64	51–69	56–74	66–84	76–94	86–104
Share (percent)												
Total, 16 years and older	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Men	70.4	66.6	61.9	57.5	54.8	53.4	52.1	51.7	51.9	52.0	52.1	52.3
Women	29.6	33.4	38.1	42.5	45.2	46.6	47.9	48.3	48.1	48.0	47.9	47.7
16 to 24	18.5	16.6	21.6	23.7	17.9	16.1	16.5	16.1	15.6	16.2	16.5	16.3
25 to 34	23.5	20.7	20.6	27.3	28.6	22.5	21.7	22.5	23.0	22.2	22.8	23.0
35 to 44	22.4	23.4	19.9	19.1	25.5	26.9	21.6	20.7	21.4	22.9	21.8	22.2
45 to 54	18.4	21.3	20.5	15.8	16.1	21.6	23.3	21.6	19.7	19.8	20.7	19.6
55 to 64	12.3	13.5	13.6	11.2	9.2	9.9	13.4	14.9	15.3	13.0	12.9	13.5
65 and older	4.9	4.6	3.9	2.9	2.7	3.0	3.5	4.3	5.0	5.9	5.3	5.3
White	–	–	–	87.5	85.4	83.5	81.2	80.3	79.5	77.7	76.2	74.9
Black	–	–	–	10.2	10.9	11.8	12.7	13.0	13.3	13.8	14.0	14.1
Asian and other[1]	–	–	–	2.3	3.7	4.7	6.1	6.7	7.3	8.6	9.8	10.9
Hispanic origin	–	–	–	5.7	8.5	10.9	13.3	14.6	16.0	18.8	21.3	23.7
Other than Hispanic origin	–	–	–	94.3	91.5	89.1	86.7	85.4	84.0	81.2	78.7	76.3
White non-Hispanic	–	–	–	81.9	77.7	73.1	69.2	67.1	65.0	60.6	56.9	53.4

Change (thousands)	1950–60	1960–70	1970–80	1980–90	1990–2000	2000–10	2010–15	2015–20	2020–30	2030–40	2040–50
Total, 16 years and older	7,420	13,143	24,169	18,900	15,023	16,858	5,100	1,859	5,410	10,427	11,307
Men	2,569	4,840	10,225	7,558	6,236	6,974	1,981	1,229	3,072	5,538	6,239
Women	4,851	8,303	13,944	11,342	8,787	9,884	3,119	631	2,337	4,888	5,069
16 to 24	23	6,301	7,454	–2,808	223	3,366	134	–562	1,864	2,274	1,525
25 to 34	–237	2,654	12,191	6,702	–4,260	2,553	2,429	1,255	–78	3,271	3,056
35 to 44	2,315	168	4,026	11,682	5,693	–3,849	–330	1,618	3,690	368	3,311
45 to 54	3,408	2,097	–39	3,338	10,219	6,316	–1,675	–2,701	1,238	3,686	310
55 to 64	1,752	1,898	702	–410	2,399	7,230	2,996	995	–3,149	1,313	2,542
65 and older	159	27	–168	397	749	1,242	1,546	1,255	1,843	–485	563
White	...	...	...	13,847	10,127	10,470	2,768	70	1,235	5,378	6,276
Black	...	...	...	2,875	2,863	3,439	1,116	698	1,543	1,917	1,778
Asian and other[1]	...	...	...	2,177	2,034	2,950	1,216	1,091	2,632	3,132	3,253
Hispanic origin	...	...	...	4,574	4,648	5,579	2,840	2,534	5,629	6,453	7,023
Other than Hispanic origin	...	...	...	14,326	10,375	11,279	2,260	–675	–219	3,974	4,285
White non-Hispanic	...	...	...	10,185	5,144	6,155	177	–2,251	–3,904	–501	–132
Annual growth (percent)											
Total, 16 years and older	1.1	1.7	2.6	1.6	1.1	1.1	.6	.2	.3	.6	.6
Men	.6	1.0	1.8	1.2	.9	.9	.5	.3	.4	.6	.6
Women	2.4	3.1	3.7	2.3	1.4	1.4	.8	.2	.3	.6	.6
16 to 24	.0	4.5	3.6	–1.2	.1	1.4	.1	–.4	.7	.8	.5
25 to 34	–.2	1.7	5.5	2.1	–1.3	.8	1.4	.7	.0	.8	.7
35 to 44	1.5	.1	2.2	4.6	1.6	–1.1	–.2	.9	1.0	.1	.8
45 to 54	2.6	1.3	.0	1.8	4.2	1.9	–.9	–1.6	.4	1.0	.1
55 to 64	2.1	1.9	.6	–.3	1.9	4.3	2.7	.8	–1.3	.6	1.0
65 and older	.5	.1	–.5	1.2	2.0	2.6	5.1	3.4	2.0	–.5	.6
White	...	...	...	1.4	.9	.9	.4	.0	.1	.4	.4
Black	...	...	...	2.4	1.9	1.9	1.1	.7	.7	.8	.7
Asian and other[1]	...	...	...	6.5	3.7	3.7	2.4	1.9	2.0	2.0	1.7
Hispanic origin	...	...	...	5.7	3.7	3.1	2.6	2.0	2.0	1.9	1.7
Other than Hispanic origin	...	...	...	1.3	.9	.9	.3	–.1	.0	.3	.3
White non-Hispanic	...	...	...	1.1	.5	.6	.0	–.4	–.4	.0	.0

[1] The "Asian and other" group includes (1) Asians and Pacific Islanders and (2) American Indians and Alaska Natives. Historical data are derived by subtracting "black" from the "black and other" group; projections are made directly, not by subtraction.

NOTE: Dash indicates data not available.

growth rate of the population. It is projected that the labor force growth rate will remain steady at 1.1 percent during the 2000–10 period, falling to 0.6 percent in 2015–20 and 0.2 percent between 2015 and 2020. It is also projected that during the 2020–30 period, the annual labor force growth rate will fall further, to 0.3 percent, whereupon it will rise to 0.6 percent during both the 2030–40 and 2040–50 periods.

The size of the labor force was 62 million in 1950, of which nearly 44 million were men and 18 million were women. The 62 million figure more than doubled during the 1950–2000 period, reaching nearly 141 million in 2000, with 75 million men and 66 million women. The labor force is projected to grow by 0.6 percent between 2000 and 2050, reaching 192 million—100 million men and 92 million women—the latter year. Following is a breakdown of the projected labor force by sex and by age.

Sex. The number of men in the labor force has always been greater than the number of women, but, historically, the growth rate of women in the labor force has been significantly higher than that of men. As a result, women's share of the labor force has increased considerably during the last 50 years, moving from 30 percent in 1950 to 47 percent in 2000. It is projected that in 2050, the shares will be 48 percent for women and 52 percent for men.

During the 1950–60 period, the women's workforce grew 2.4 percent annually in comparison with 0.6 percent for men. In the next decade, from 1960 to 1970, the growth rate of the labor force for women was 3.1 percent per year, more than three times greater than the labor force growth rate of men. During the 1970–80 period, the growth rate for women was 3.7 percent, twice that for men. During 1990–2000 and 2000–10, the growth of the women's labor force was 1.4 percent, compared with men's 0.9 percent. The disparity in labor force growth rates for men and women is expected to continue throughout the projection horizon, causing the gender gap in the U.S. workforce to shrink to 8.7 million by 2050.

Population and labor force pyramids also show the gains made by women in their share of the workforce during the last 50 years. (See chart 1.) In the 1950 pyramid, the labor force of women at all age groups looks different from that of men. In 2000, however, because of the narrowing of the gender gap in the labor force, the shape and size of the pyramid for both men and women look very much alike. As this trend continues to 2050, the shape of the pyramid for both men and women becomes even more symmetric—a reflection of a further narrowing of the gender gap in the workforce.

Age. Among all the age categories in the labor force, the 55-and-older group is expected to undergo the most sweeping changes in the years to come, due primarily to the aging of the baby-boom cohorts. The group's share in the labor force was 17 percent in 1950. As a result of a number of factors, including the availability of Social Security to men 62 years of age since 1960, the increased availability of disability awards, and the money accrued in pensions, the share of those 55 and older decreased to 13 percent in 2000. However, the share is projected to increase again in the next 50 years, reaching 20 percent of the total labor force in 2020 and then decreasing to 19 percent in 2050. The growth rate of the 65-and-older age group—1.2 percent in the 1980–90 period—rose to 2.0 percent during 1990–2000. The growth rate of this group within the labor force is projected to be 2.6 percent in the 2000–10 period, 5.1 percent in 2010–15, and 3.4 percent between 2015 and 2020. After 2020, the growth rate of the 65-and-older age group is projected to taper off as baby boomers begin to leave the labor force in increasing numbers. The decrease in the labor force growth rate over this period is also a result of the increase in population in age groups with lower participation rates.

The share of the 35–44 age group peaked in 2000 at 27 percent. This group is expected to decline in numbers as the baby boomers continue aging, but it will maintain its share of the labor force—between 21 and 22 percent—over the next 50 years. The labor force share of the 45–54 age group is projected to decrease from 22 percent in 2000 to 20 percent in 2020 as a result of retirements and because of departures from the labor force.

The 16–24 and 25–34 age groups are expected to maintain their shares of the labor force between 2000 and 2050. In 2000, their shares were 16 percent and 23 percent, respectively. The Bureau projects that by 2050 their respective shares will be about the same.

Labor force rates by race and ethnicity

White non-Hispanic labor force. The white non-Hispanic group has the largest share of the U.S. labor force, but that share has been on the decline and is projected to continue to decline over the next 50 years. In 1980, the white non-Hispanic labor force was 88 million, and its share of the labor force was 82 percent. Two decades later, in 2000, the number of non-Hispanic whites increased to 103 million, but their share of the labor force fell to 73 percent. By 2015, the white non-Hispanic group is projected to reach 109 million, or 67 percent of the total labor force. It is anticipated that, in 2020, the white non-Hispanic labor force will actually decrease by a little more than 2 million, to 107 million, which will constitute 65 percent of the total workforce. The white non-Hispanic share of the labor force is projected to drop even further in later years, reaching a low of 53 percent in 2050.

The white non-Hispanic labor force grew 1.1 percent between 1980 and 1990 and 0.5 percent between 1990 and 2000. The growth rate is expected to be 0.6 percent over the 2000–10 period and negative after 2015. These factors will serve to make the labor force even more diverse by 2050.

The decline in the number of white non-Hispanics currently is accompanied by faster growth of other racial and ethnic groups in the U.S. workforce. Also, the upcoming retirement of the baby boomers, a group that has a large share of white non-Hispanic men, will lower that group's share of the total labor force. Finally, the low fertility rate and low migration of white non-Hispanics relative to other racial groups is another factor that will contribute to the group's decreasing share of both the population and the labor force.

Black labor force. In 1980, blacks had the second-largest share of the labor force, 10 percent. Their share increased to 12 percent in 2000, and blacks continued to maintain their relative position as the second largest among all racial and ethnic groups. BLS projections indicate that by 2010, their share will increase to nearly 13 percent, after which blacks will slip to third place in their share of the labor force as Hispanics jump to a 13-percent share.

The number of blacks in the labor force was 17 million in 2000 and is expected to be 27 million in 2050. The increase will be due mostly to the faster growth of the black population through higher fertility rates among black women and relatively high participation rates, also among black women.

Hispanic origin. The share of Hispanics in the labor force was 6 percent in 1980 and increased to 11 percent in 2000. It is projected that in 2010, the share of the Hispanic-origin group in the labor force will be 13 percent. The Hispanic share is anticipated to increase steadily through 2050. Although the growth rate of Hispanics in the labor force has declined somewhat from its peak of 6 percent during the 1980–90 period, it is still growing very rapidly. The Bureau projects that the Hispanic-origin category will constitute 24 percent of the U.S labor force by 2050. The growing share of Hispanics in the labor force is due mainly to their high level of immigration from 1950 to 2000. These new immigrants have been mostly in the younger age cohorts, with higher-than-average fertility rates, a factor that, in large measure, contributes to their population growth in the United States.

Asians and others. Asians have been the fastest-growing sector of the labor force in the past and are projected to remain so for the next 50 years. With 2.5 million people in the labor force in 1980, the category of "Asians and others" had a labor force share of 2 percent that year. By 2000, with nearly 7 million, the group had more than doubled its share, to 5 percent. The high growth of "Asians and others" is expected to continue through the projection period. In 2050, the group is anticipated to number 21 million, or 11 percent of the labor force. As a result of a large number of immigrants in the last 50 years, this group, although small, is likely to be the fastest-growing part of the labor force.

As can be seen from table 5, racial and ethnic minorities have assumed an increasing presence in the labor force. This presence is evident in the growing diversity of the workforce.

Median age

The foregoing analysis has demonstrated that the changes in the age structure of the population result in different aggregate participation rates and could ultimately affect the number of people in the workforce. The median age summarizes the age structure of the labor force and is defined as the age that splits the population group into two equal parts, with 50 percent younger and 50 percent older. (See table 6.)

The median age of the U.S population was at its highest in 1960, at 40.5 years. With the entry of the baby-boom generation into the labor force, the median age began to decrease, reaching a low of 34.6 years in 1980. In 1990, the median age increased to 36.6. In 2000, the median age again increased, to 39.3, and was the same for men and women.

The aging of the baby boomers will result in significant changes in the age structure of the labor force, chief among them an increase in its median age. The rise in the median age is projected to continue until 2010 and reach 40.6. With the retirement of the baby-boom generation after 2015, the median age of the labor force will decrease slowly and is projected to be 39.7 by 2050. The retirement of a large number of white men in the boomer generation is projected

Table 6. Median age of the labor force, 1970–2000 and projected, 2010–2050

Group	1970	1980	1990	2000	2010	2015	2020	2030	2040	2050
Total	39.0	34.6	36.6	39.3	40.6	40.5	40.2	40.0	39.9	39.7
Men	39.4	35.1	36.7	39.3	40.6	40.5	40.2	40.1	40.0	39.9
Women	38.3	33.9	36.8	39.3	40.6	40.7	40.7	40.8	40.6	40.7
White	39.3	34.8	36.8	39.7	41.3	41.1	40.7	40.4	40.3	39.9
Black	–	33.3	34.9	37.3	37.7	38.0	38.2	38.8	38.9	39.0
Asian and other[1]	–	34.1	36.5	37.8	38.7	38.8	38.8	38.8	39.1	39.3
Hispanic origin[2]	–	32.0	33.2	34.9	36.4	36.6	36.7	36.8	37.1	37.6

[1] The "Asian and other" group includes (1) Asians and Pacific Islanders and (2) American Indians and Alaska Natives. Historical data are derived by subtracting "black" from the "black and other" group; projections are made directly.

[2] Persons of Hispanic origin may be of any race.

NOTE: Dash indicates data not available.

Table 7. **Economic dependency ratio, 1950–2000 and projected, 2000–10**

Age group	1950	1960	1970	1980	1990	2000	2010	2015	2020	2030	2040	2050
Total population	139.3	150.4	140.4	108.9	98.3	93.9	90.3	91.9	97.4	106.4	109.0	111.4
Under 16	67.7	81.5	73.0	50.7	45.8	44.1	40.1	40.2	41.5	43.2	43.5	44.3
16 to 64	56.9	50.2	47.4	37.4	30.5	28.3	28.9	28.2	28.7	28.3	28.6	29.8
65 and older	14.7	18.7	19.9	20.8	22.1	21.6	21.3	23.5	27.2	34.9	37.0	37.2

to lower men's median age to 40.2 in 2020 and 39.9 in 2050. Women's median age is expected to be higher, at 40.7, in 2020 and to stay higher than men's in the decades that follow.

The Hispanic labor force is the youngest group, with a median age of 34.9 in 2000. The median age of Hispanics is projected to increase to 37.6 in 2050, but the group will continue to have the lowest median age among all the race and ethnicity groups. The high fertility rate among Hispanics will keep their population and labor force relatively younger throughout the projection period. In addition, the impact of large numbers of Hispanic immigrants, which are mostly in the younger age groups, is expected to be significant.

Economic dependency ratio

The economic dependency ratio is defined as the number of persons in the total population (including Armed Forces personnel overseas and children) who are not in the labor force per 100 of those who are in the labor force. (See table 7.) For every 100 persons in the 1950 labor force, about 139 were not in the labor force. Of this group, 48 percent were children under age 16, 43 percent were between 16 and 64 years of age, and only 10 percent were 65 and older. With the influx of the baby boomers into the workforce and a significant drop in the number of births, the economic dependency ratio has decreased considerably since 1960. The ratio dropped below 100 for the first time in 1987 and declined further to 94 in 2000, of which 47 percent were children under 16, 30 percent were between 16 and 64 years of age, and 23 percent were 65 and older.

It is projected that the economic dependency ratio will continue to decline until 2010, when it is expected to reach a low of 90 people dependent on every 100 workers. As the baby-boom generation retires and leaves the workforce sometime between 2010 and 2015, the economic dependency ratio is anticipated to rise again. The Bureau projects that, by 2050, for every 100 people working, there will be 111 who are not in the labor force, of which 44 will be children under age 16, 30 will be between 16 and 64 years, and 37 will be 65 and older.

With the passage of each decade, the share of the 65-and-older age group in the total population will rise along with the economic dependency ratio. In 1950, the number of older persons who were out of the workforce per 100 working population was 15. In 2000, the figure rose to 22, and it is expected to reach 37 in 2050. The Census Bureau anticipates more immigration between 2020 and 2050 in response to this increase in the projected economic dependency ratio of the 65-and-older age group. The increase in the ratio is characterized as a "dramatic downward shift in the availability of potential workers relative to people outside the normal working age."[13]

THE LAST 50 YEARS OF THE 20TH CENTURY have witnessed momentous changes in the size, composition, and characteristics of the U.S. labor force. The same social, demographic, and economic forces that influenced the level, growth, and composition of the labor force during the past 50 years will continue to influence the workforce in the coming decades. Chief among these forces has been an explosion of women's participation rates for all age groups, which caused the share of women in the labor force to increase from 30 percent in 1950 to 47 percent in 2000. In contrast to the last 50 years, during which the surge in women's participation propelled labor force growth, the next 50 years will likely see stabilization in the growth of women's participation, resulting in workforce growth dropping to 0.6 percent annually.

Another factor responsible for the labor force growth of the past 50 years is the baby-boom generation. Just as the entry of the baby boomers swelled the ranks of the labor force in the last three decades, their exit will have a profound effect on the level and composition of the U.S. labor force in the next two decades. The baby-boom generation will remain a generator of change even at its retirement.

The labor force will continue to grow more diverse, despite a slower rate of labor force growth among minorities. With relatively high fertility rates and increasing participation rates, minorities in the workforce are projected to expand their shares substantially. The share of Hispanics especially will rise steadily, approaching one-quarter of the labor force.

The future is unknown and difficult to predict. Any attempt, such as this one, to glean what will happen in the future is an exercise in extrapolation of past trends and is based mainly on the assumption that the future will be subject to the same economic structures as the past. However, by relaxing or otherwise modifying one's assumptions, one can arrive at differing sets of results. In fact, the future is always full of surprises, and 50 years is a relatively long time on the scale of economics, so one should not be surprised if the future labor force changes in ways just as dramatic as those of the last 50 years. ☐

Notes

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[1] The civilian labor force consists of all employed and unemployed persons actively seeking jobs in the civilian noninstitutional population.

[2] See Howard N Fullerton, Jr., and Mitra Toossi, "Labor force projections to 2010: steady growth and changing composition," *Monthly Labor Review*, November 2001, pp. 21–38.

[3] The following assumptions about the future course of events are made before the labor force projections are carried out:

- The current definition of the labor force will remain the same over the projection period.
- Work patterns will not change significantly during the projection period.
- No major war or social upheaval will occur during the projection period.
- Laws and legislation will not change the conditions under which individuals decide to enter or stay out of the labor force.
- The general structure of economic relationships in the future will be roughly identical to those in the past, and economic condition will follow the basic trends of the post-World War II era.

[4] The CPS is a monthly survey of households, conducted by the Bureau of the Cenusus for the Bureau of Labor Statistics.

[5] Fredrick W. Hollman, Tammany J. Mulder, and Jeffrey E. Kallan, "Population Projections of the United States, 1999 to 2100: Methodology and Assumptions," working paper no. 38 (U.S. Bureau of the Census, 1999).

[6] The civilian noninstitutional population does not include the Armed forces and comprises all persons 16 years and older who are not inmates of penal or mental institutions, sanitariums, or homes for the aged.

[7] The civilian labor force participation rate is the proportion of the civilian noninstitutional population that is in the labor force.

[8] See Howard N Fullerton, Jr., "Labor force 2006: slowing down and changing composition," *Monthly Labor Review*, November 1997, pp. 23–38.

[9] A *cohort* is defined as those people within a population who have experienced the same significant life event within a given period of time. The cohorts used for social scientific research usually consist of people who experienced a common significant life event within a period of from 1 to 10 years.

[10] Douglas S. Massey, University of Pennsylvania Symposium on the Role of Research Universities in Innovation, Social Mobility, and Quality of Life in the 20th Century, Washington, DC, Association of American Universities, Apr. 17, 2000.

[11] Kingsley Davis and Pietronella Van den Oever, "Demographic Foundations of New Sex Roles," *Population and Development Review*, September 1982, pp. 495–511.

[12] These standards were revised in 1997 for implementation no later than 2003. For more information, see "Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity" (Office of Management and Budget, Oct. 30, 1997); on the Internet at **http://www.whitehouse.gov/omb/fedreg/ombdir15.html** (accessed 6/18/02).

[13] Hollman, Mulder, and Kallan, "Population Projections," p. 18.

An analysis of lump-sum pension distribution recipients

According to data from the Survey of Income and Program Participation (SIPP), most recipients of lump-sum pension distributions "roll over" at least part of their lump sums; those who spend theirs typically do so to pay off debts, purchase other items, and cover everyday expenses

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Employer-sponsored pensions, one-third of the "three-legged stool" consisting of Social Security income, private savings, and pensions, account for almost 20 percent of aggregate income for people 65 years or older.[1] With Social Security's projected financial shortfall, income from pensions may play an even greater role in providing economic security in the future, especially for those without substantial private savings.

While pensions have traditionally been paid in the form of a monthly annuity, lump-sum options have always been prominent in defined contribution plans (especially 401(k)-type plans); in the past decade, however, availability has also increased in defined benefit plans. Woods estimated that approximately $65 billion was distributed from both defined contribution and defined benefit plans in 1990[2], with this amount growing to between $87 and $130 billion in 1995.[3] With preretirement access becoming more prevalent in the design of pension plans through loans, withdrawals, and *lump-sum distributions*, concerns have been raised in both the public policy and retirement research communities regarding future retirement income adequacy for today's workers. If individuals spend their retirement nest egg early in their career or even at retirement, they risk spending their golden years in poverty.

In this study, we use both descriptive and regression analysis to examine the characteristics of individuals who save and spend their lump-sum distributions, examining both preretirement distributions and those received at or after retirement. We use data from the 1991, 1992, and 1993 panels of the Survey of Income Program and Participation (SIPP) matched to Summary Earnings Record (SER) data maintained by the Social Security Administration. This study adds to the lump-sum literature in two ways. First, we examine specific uses of the distribution—such as medical expenditures or car purchases—while most other lump-sum studies only aggregate specific lump-sum uses into two categories, 'saved' or 'spent'. Studying specific uses of these distributions can prove to be a valuable key as to what motivates the spending in the first place. For example, using the funds for everyday expenses could signal a need to meet immediate cash constraints, while purchasing a boat or car may suggest myopia or excessive consumption on the part of the recipient.

The second way this study adds to the existing literature on lump-sum distributions is by examining the role that individual earnings may play in lump-sum decisions by using three different measures of earnings constructed from earnings records of the Social Security Administration. Previous research has found financial variables instrumental in explaining who saves their distributions, but most research has used only one-year, self-reported measures of earnings, which may include both permanent and transitory components. We try to assess the effects of these more permanent and transitory components by examining the relationship between earnings and lump-sum decisions using earnings measures for three different periods: annual earnings in the year of the distribution, average earnings for the

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5 years preceding the distribution, and average projected lifetime annual earnings. Each of these three earnings variables reflects a different time frame to which the lump-sum recipient may look when making the decision about what to do with his or her distribution.

The first two sections of the article provide background information on lump-sum distributions, including the various types of pension plans available, a description of what constitutes a lump-sum distribution, and a summary of current trends regarding lump sums in pension plans. The next three sections discuss, respectively, the tax treatment of lump sums, previous research conducted on the incidence and utilization of lump-sum distributions, and the data used and our analysis. The final two sections provide a descriptive analysis of specific lump-sum uses—including multiple uses—and a multivariate probit analysis of who saves and who spends their lump sums.

In our analysis, we first examine the uses for lump sums as they are coded in the SIPP, including patterns of use depending on age at the time of the distribution, amount of the distribution, and earnings. We then aggregate the specific uses into two categories—*saved* and *spent*—to describe more generally who spends and who saves their distributions. Finally, we estimate a multivariate probit model to sort out the specific characteristics that may affect the decision to save a lump sum, paying particular attention to the earnings measure used. We examine lump-sum distributions regardless of whether they were made prior to, at, or during retirement. Due to data limitations, however, we are unable to determine if the recipients actually were retired at the time of the distribution—we know the year in which the distribution was taken, but we do not know the recipient's retirement status at the time of the distribution.

In both our descriptive and regression analyses we examine an earnings measure not found in other lump-sum studies—average earnings for the 5 years preceding the distribution—as well as earnings in the year of the distribution and average projected lifetime annual earnings. Analyzing lump-sum use in relation to these three earnings measures allows us to examine whether it makes a difference in the lump-sum decision if earnings are measured over a short period (1 year), a medium-length period (5 years), or a lifetime period. Researchers often find that earnings data are available for only 1 year, so an important goal of this study is to compare earnings data for various periods to see if it makes a difference in the lump-sum decision.

Pension plans and lump-sum distributions

A pension plan is an employee benefit primarily intended to provide income to employees upon their retirement, typically in the form of a monthly annuity for life. Pension plans fall into one of two broad categories: *defined benefit plans* and *defined contribution plans*. Depending on the rules of the specific plan, employees may have the option of receiving a single lump-sum distribution in the case of retirement, disability, death, attainment of age 59½, termination of the plan, or separation from service. A lump-sum distribution from a qualified retirement plan is a distribution of the entire balance (or in the case of a defined benefit plan, the discounted present value) of a participant's account during a taxable year and normally is categorized as a distribution at retirement or a preretirement distribution. From 1988 to 1992 alone, an estimated $59 billion was received in preretirement lump sums, or 14 percent of the $431 billion in contributions made to defined contribution plans over the same period.[4]

Defined benefit plans. In a defined benefit plan, benefits are specified amounts to be paid monthly to the participant after retirement for the remainder of the participant's life. Each employee's future benefit is determined by a specific formula, usually based on salary and years of service, and the plan provides a guaranteed level of benefits at retirement. Typically, these plans do not require the employee to contribute to the plan, because the future benefits are financed through regular employer contributions. Hence the employer bears the risk associated with providing the guaranteed level of retirement benefits. Further, if the employer is unable to pay the retirement benefits, the Pension Benefit Guaranty Corporation (PBGC) will pay the guaranteed benefit up to a statutory limit.[5]

Traditionally, defined benefit plans have paid benefits at the time of retirement in the form of an annuity; however, lump-sum options both before and at retirement are gaining in popularity. According to data from the Bureau of Labor Statistics (BLS) on medium and large private establishments, 2 percent of defined benefit plans offered lump sums in 1989, while 23 percent of plans offered them in 1997.[6] Much of this increase in lump-sum options has been fueled by the conversion of many defined benefit plans to *cash balance* plans, a type of defined benefit plan that creates a notional account for each participant while the assets remain in a trust managed by the employer. Upon separation from employment, cash balance account balances are typically distributed in the form of a lump sum.[7]

Defined contribution plans. In a defined contribution plan, employers generally promise to make annual or periodic contributions to accounts that are set up for each employee. While the level of employer contributions to a defined contribution plan is guaranteed, the level of benefits available at retirement is not. The benefits payable under the plan can be a combination of employer contributions, employee contributions, and investment gains or losses. Upon job separation, most defined contribution plans allow for payout to the participant in the form of a lump-sum distribution.

Defined contribution plans have grown considerably over the last decade. From 1993 to 1997, for example, the number of new Savings and Thrift plans (a type of defined contribution plan) increased by 75 percent.[8] Because lump-sum distributions are one of the most common provisions found in these types of plans, their growth has contributed to the growth in the number of workers with lump-sum options.[9] Savings and Thrift plan participants with lump sum provisions increased from 8.1 million in 1993 to 13.5 million in 1997. Also, by 1997 defined contribution plan participants were nearly 4 times more likely than defined benefit plan participants to participate in a plan that allowed for a lump-sum distribution at job separation.[10]

The Employer Retirement Income Security Act of 1974 (ERISA). This legislation provides specific rules governing both defined benefit and defined contribution pension plans and their respective lump-sum distribution provisions. For example, if the present value of the pension plan participant's vested[11] accrued benefit is greater than $5,000, ERISA states that the plan cannot force the plan participant to begin receiving benefits before reaching the age that is generally considered normal retirement age as specified in plan documentation. Vested accrued benefits only refer to employer contributions; employee contributions are always fully vested. However, if the present value of the vested accrued benefit plan is $5,000 or less, the plan can require the individual to receive benefits when they first become distributable, such as when the employee separates from the employer. Generally, pension plans will provide a lump sum if a plan participant's accrued benefit is $5,000 or less.[12]

Triggers and uses of lump-sum distributions

Separating from a job can prompt some major and often confusing decisions, one of which is figuring out what to do with the money from a pension plan. An individual may have several options depending on the type and design of the plan. Employees may choose to keep the funds in a former employer's plan, transfer the funds to a new employer's plan, transfer the money directly into a tax-deferred account (also known as *roll over*) such as an Individual Retirement Account (IRA), purchase an annuity, or take the distribution in cash and then decide what to do with it. In this section, we discuss each of these options in turn.

Taking the distribution in cash. For many individuals, taking the distribution has one major advantage—immediate access to cash. Some may use this money for consumption, such as to take a vacation, purchase a new car, or simply to pay for everyday living expenses. Others may take the distribution and place it in a non-tax-deferred saving vehicle, such as stocks or bonds, or use it to help finance a new business. (Hereafter, we refer to these types of saving vehicles as *other saving*.) Still others may take the money and then decide to put it back into a tax-qualified account, such as an IRA.

Possible disadvantages to taking the distribution out of a retirement saving vehicle include the loss of tax-deferred compounding over time and less wealth for retirement if the money is spent on consumption. Individuals who take a preretirement distribution may also face tax penalties or be subject to additional Federal tax withholding. Furthermore, these individuals run the risk of being taxed at a higher income tax rate than if they had withdrawn the money on or after retirement, given that the income tax base is generally higher before retirement due to higher labor earnings.

Rollling over the distribution. An individual often has the option of leaving his lump sum with the former employer, directly transferring it into a new employer's plan or putting it into an IRA, or purchasing an annuity. For our purposes, these options will be referred to as *direct rollovers.*[13] Individuals also may take the distribution and re-invest it themselves in one of the instruments just mentioned, and that is called an *indirect rollover*. The tax consequences for indirect rollovers often are different than for direct rollovers, depending on the individual situation. The advantages to rolling over a distribution are obvious: income for retirement, tax-deferred compounding, and numerous other tax advantages. Nonetheless, individuals often cite the decreased liquidity that accompanies tax-deferred accounts as one disadvantage of investing in these types of vehicles.

Individuals who purchase annuities have additional costs and benefits to consider. Those who purchase certain types of annuities have the advantage of being relieved of the responsibility of making further investment decisions, as well as being provided with the security of a set future stream of income payments. Disadvantages to purchasing an annuity include decreased financial flexibility and the possibility of dying before the full value of the contract is realized.

Although benefits paid in the form of an annuity historically have been commonplace in defined benefit plans, defined contribution plan participants rarely exercise this option. For example, using the 1992–96 waves of the Health and Retirement Study,[14] Michael D. Hurd, Lee Lillard and Constantijn Panis find that only 4 percent of defined contribution participants purchased an annuity.[15] One contributing factor may be that most defined contribution plans do not pay the up-front cost to purchase the annuity, commonly known as the "load," creating a disincentive for participants to voluntarily choose this option.

Tax treatment of lump sum distributions

As the option to take a lump sum has grown over the past two decades, policy makers have adjusted the tax code to encourage the roll over of distributions. In the following paragraphs we describe two important pieces of legislation that are aimed at maintaining pension funds within the tax-deferred retirement saving system.

The Tax Reform Act of 1986. This was the first major piece of legislation to address the issue of lump-sum distributions. Beginning in January 1987, a 10-percent tax penalty was imposed on any taxable lump-sum amounts withdrawn from a qualified retirement plan that were not rolled over into a tax-deferred instrument within 60 days of receipt. This penalty is levied on those who do not maintain or re-invest their distribution in a tax-deferred vehicle before age 59½, given the distribution is not the result of death, disability, certain medical expenses, or under early retirement plan provisions (after age 55). Additionally, individuals aged 55 years and older who take a lump sum after job separation also are exempt. To avoid the penalty, the individual must either directly roll over the balance into a new employer's plan or an IRA (including both Individual Retirement Accounts and Individual Retirement Annuities), leave the balance in the previous employer's plan, or redeposit the balance into one of the saving vehicles mentioned earlier within 60 days. Partial lump sums are subject to the same 10-percent penalty on the amount withdrawn.

Has imposition of the penalty increased rollovers? In a 1996 study, Angela E. Chang examines the effects of the penalty using microdata from the 1988 Current Population Survey (CPS).[16] She finds that a 1-percent increase in the tax penalty raises the probability of rollovers among high-income recipients[17] by 1.3 percentage points, but such an increase does not have a statistically significant effect on low-income recipients.[18] Nevertheless, the actual revenue received from the penalty over the period from 1987 to 1989 greatly exceeded expectations, with $547 million anticipated and $1.9 billion collected.[19]

The Unemployment Compensation Act of 1992. This legislation added a new qualification provision under section 401(a)(31) of the Internal Revenue Code that requires qualified plans to provide employees with a direct rollover option. Employers must allow terminating employees the option of directly rolling their distribution amounts over to an IRA or another employer's plan. If the employee takes the distribution in cash, the employer must withhold 20 percent of the balance for Federal income taxes.[20] This withholding applies even if the employee receives a distribution and then rolls it over within the 60-day period. Partial rollovers are subject to the same withholding requirements and 20 percent of the amount not directly rolled over must be withheld.[21]

Thus far, little research has focused on the effectiveness of the 1992 legislation. Paul Fronstin and his co-authors[22] provide a descriptive analysis of the use of lump-sum distributions from the 1993 CPS and compare them with similar tabulations from the 1996 Retirement Confidence Survey (RCS).[23] The number of lump-sum distributions invested in retirement accounts before and after the 1992 legislation is quite similar: 45.5 percent for distributions received from 1987 to 1993 (CPS) and 46 percent for distributions received from 1993 to 1996 (RCS). These figures suggest that the withholding tax has not had much effect, although it would be premature to conclude this without additional supporting evidence.

Other tax consequences for nonrollover. Tax penalties are not the only tax disincentives of early lump-sum withdrawal. Lump sum distributions, like any other pension income receipts, are subject to Federal income tax the year they are received. The earlier the withdrawal in one's work career, the larger the foregone tax savings that deferment brings in income tax. Additionally, since labor income during one's working years usually is higher than income during retirement, the tax rate at which the lump sum is taxed may be higher than if the individual waited until retirement or later to withdraw the money.

An example of the tax consequences for nonrollover. With the new tax laws in effect, taking a lump sum—even if it is placed back into a qualified account within 60 days—can greatly reduce the amount of benefit the employee has built up. In the following example, we consider the reductions taken for a typical 50-year old male worker who changes jobs, withdraws his balance of $100,000 from his 401(k) account, and purchases a speedboat with the money.

As stipulated in the 1992 Act, the employer must withhold 20 percent of the lump-sum distribution ($20,000) for Federal income tax as soon as he accepts the check, leaving him $80,000 to buy his boat. However, because he has not yet reached age 59½ and does not roll over the balance into a qualified account within 60 days, he is also penalized 10 percent of the *total balance*, or $10,000, which he must account for in his Federal income tax return for that year. Not counting the additional income tax he must normally pay on the 401(k) withdrawal itself and the fact that he may pay a higher overall income tax rate for the year of the distribution than if he had withdrawn the money after retirement, he would ultimately have, at the most, $70,000 of his balance left.

Previous research

Much research has been conducted on who is eligible for a lump-sum distribution, how the money is spent, and who saves and who spends their lump sum. In this section, we describe the relevant literature pertaining to each of these topics.

Lump-sum eligibility. The percentage of participants eligible for a lump-sum distribution has increased considerably in the last two decades. According to a 1999 study of CPS data by Leonard E. Burman, Norma B. Coe, and William G. Gale, among those covered by defined benefit and defined contribution pensions in the 1988 CPS, 56 percent reported being eligible for a lump sum if they were to separate from their current job; by 1993, this figure had risen to 68 percent.[24] In another study examining 1993 SIPP data, Patrick J. Purcell finds that in late 1995 and early 1996 (the retirement module of the 1993 SIPP was fielded in 1995 and 1996), 82 percent of workers covered by a pension plan had a lump sum option.[25] Eligibility has most likely increased due to a combination of growth in defined contribution plans and an increase in lump-sum options in defined benefit plans over this period.

Individuals that are eligible for lump sums tend to differ from those who are not eligible in several ways. In the Burnam study mentioned earlier, the authors find that workers in defined contribution plans, those with annual family income of more than $10,000, and those with at least a high school education are more likely to have lump-sum options.[26] In addition, the kind of occupation in which one works also appears to make a difference—a larger proportion of managers, sales and technical workers, and clerical workers are eligible for lump-sum distributions than are service workers and those in more traditional "blue collar" occupations.

Lump-sum use. Several patterns emerge in the literature when examining lump-sum use: the percentage of both rollovers and distributed dollars rolled over has increased over time; most lump sums are not rolled over, although the majority of distributed dollars are; and a significant portion of individuals who do not roll over their balances save the money in another form.

The Burnam study examines the incidence of lump-sum rollovers for both preretirement and retirement distributions as reported in the CPS in 1988 and in 1993.[27] In the 1988 survey, only 16 percent of lump-sum recipients rolled over their whole distribution, and 2 percent rolled over a portion of it. In the 1993 survey, a greater percentage of individuals rolled over either all or part of their balance: 33 percent rolled over the whole distribution, and 7 percent rolled over part of the lump sum. Using data from Hewitt Associates, Paul Yakoboski also reports growth in rollovers, but examines only preretirement distributions resulting from job change.[28] He finds that 35 percent of job changers who received distributions rolled over their funds in 1993, while 40 percent did so in 1996.

Although historically most distributions have not been rolled over, the majority of the dollar value of all distributions has been rolled over. For example, 73 percent of distributed dollars were rolled over in 1993, and 79 percent were rolled over in 1996.[29] Examination of tax data reveals similar rollover rates: John Sabelhaus and David Weiner report that 70 to 77 percent of distributions were rolled over in 1995.[30] The fact that a much larger percentage of dollars than distributions is rolled over makes sense, given the large positive relationship between rollovers and the size of the distribution that repeatedly has been found in the lump-sum literature.[31] Further, the distribution of lump-sum amounts appears to be very skewed: William F. Bassett, Michael J. Fleming, and Anthony P. Rodrigues report that the average distribution between 1988 and 1992 was $10,367, while the median distribution amount was only $3,263.[32] Likewise, the more recent study of lump sums by Purcell reported that in the end of 1995 and beginning of 1996, the average distribution was $13,200, and the median distribution was $5,500.[33]

If an individual does not roll over his distribution, what does he do with the money? Taking the lump-sum distribution does not necessarily decrease wealth meant for retirement if this money is re-invested in some other manner. Gary V. Englehardt found that approximately 25 percent of those in the 1992 HRS who took their lump sums (16 percent of all job changers aged 51–61 in 1992 with pensions) invested their distributions in other saving vehicles or paid down debt.[34] Describing the uses of nonrollovers from the 1993 CPS, James M. Poterba, Steven F. Venti and David A. Wise find that using the money for everyday expenses is the most common use, with 22 percent of individuals using *any portion* of their distribution in this way (more than one use is identified).[35] This is followed in prevalence by paying down loans or debt (19 percent) and putting the money in a saving account or other financial instrument (16 percent). However, when weighted by distribution dollars, 22 percent of non-rollover distributions were put into other savings or investments, 11 percent of funds were used for everyday expenses, and 11 percent of lump sums went towards paying down debt. Again, we see the larger distributions being saved and the smaller ones being consumed.

It is important to note that the both the CPS and SIPP do not include pension balances left with the previous employer in the definition of lump-sum distribution, but the HRS does. The proportion of individuals who elect this option is substantial: Michael D. Hurd and his coauthors examine the 1992, 1994 and 1996 HRS and find that 43 percent of defined contribution plan participants with a lump-sum option who separated from a job during that time left the funds with their employer.[36] This point must be kept in mind when inferring SIPP results to *all individuals who separated from an employer*. Given this, figures on rollovers in the CPS and SIPP probably greatly underestimate the total number of individuals (and funds) that remain in the tax-deferred retirement system for those who separate from a job.[37]

Characteristics of lump sums and those who save them Previous work on lump-sum distributions has found several common characteristics that describe who saves or spends lump sums. Most studies look solely at who *rolls over* their distributions, while only a handful define saving as both rollovers and investment in other saving vehicles. We will discuss the most recent work examining rollovers, as well as one study that looks at both rollovers and other saving, in the following paragraphs.

The amount of the distribution has consistently been found to be one of the strongest predictors of whether a distribution is rolled over. For example, several studies find that the size of the distribution has a large positive effect on rollovers.[38] In particular, the study by Poterba and others finds that individuals with distributions of $10,000 or more are 21 percent more likely to roll over their money than those with distributions of less than $1,000.[39] They find this relationship to be even stronger when including both rollovers and other saving uses in the definition of saving. Individuals with distributions of $10,000 or more are 34 percent more likely to save their balances than those with distributions of less than $1,000.

Several other characteristics have been found to affect the incidence of rollovers. Both the Poterba study and the Purcell study find that as age increases, the probability of rollover also increases.[40] Poterba and his coauthors also find similar results when including other saving in the definition.[41] Further, Purcell finds that race affects lump-sum disposition: Whites are twice as likely as blacks to place their funds in a qualified account, even after controlling for education and income.[42] Interestingly, Purcell's study is the only one that we know of to use the SIPP, and it is the only one to find evidence that race affects lump-sum disposition.

Income has also been shown to affect rollovers. Two studies analyze 1993 CPS data and find that both household earned income and total family income are positively correlated with rolling over a distribution.[43] Purcell tests three different earnings and income measures from the 1993 SIPP and arrives at similar conclusions regarding their impact on the rollover decision: Those whose annual income was more than $36,000 were significantly more likely to roll over their balances than individuals whose annual income was less than $18,000 per year (regardless of which income definition is used).[44] Both the 1998 Poterba study and the one by Purcell divide income into four categories and find that the highest income group is the only group for which income is a statistically significant predictor of rollovers.[45] Poterba and others find similar results when they expand their saving definition to include other saving vehicles, although the magnitude of the effect is only half as large.[46]

Data and relevant variables in the SIPP

For our analysis, we use a pooled sample from the 1991, 1992, and 1993 panels of the SIPP matched to earnings measures taken from the Summary Earnings Records.[47] Each SIPP panel consists of a series of "waves," or 4-month intervals. Each household is interviewed once at the end of each wave regarding events from the preceding 4 months. Most of our data are from the *Retirement Expectations and Pension Plan Coverage* topical module of the SIPP (hereafter called the *Pension module*) that contains information primarily related to current and past pension coverage.[48] The panel weight we use in our tabulations is constructed by the Bureau of the Census for this particular combination of panels, and it includes the three panel weights from the public data set in its construction.[49]

We use the Summary Earnings Record (SER) of the Social Security Administration (SSA) for the construction of our three earnings variables. The SER contains earnings covered by Social Security that are derived from payroll tax records for the period from 1951 to 1999 (up to the taxable wage ceiling). One of our earnings variables—*earnings in the year of the distribution*—is taken directly from the annual figures recorded in the SER. We also use the SER to construct earnings in two other periods, *average annual earnings over the 5-year period before the distribution* and *average projected lifetime annual earnings*. The 5-year earnings measure is constructed by taking the average of annual earnings found in the SER for the 5 years preceding (but not including) the year of the distribution. We construct the expected average annual earnings over a lifetime from a projected average indexed *monthly* earnings created for analysis at the Social Security Administration. We convert all of our earnings measures to 2000 dollars, because that is the most recent year for which the Consumer Price Index (CPI) is available for this study.[50]

A total of 6,851 individuals aged 25 years and older—13 percent of the respondents interviewed for the Pension topical module—reported receiving at least one lump-sum distribution from a previous pension plan.[51] The survey does not report whether the lump sum was from a defined benefit or a defined contribution plan. We delete 1,382 individuals from this group to form a sample of 5,469 respondents for our analysis. We drop these individuals either because they were not matched to their respective earnings in the SER,[52] or they were employed in jobs not covered by Social Security employment during or around the time they received their lump sum, which would give them zero SER earnings for these years.[53]

Descriptive analysis: lump-sum uses

In this section, we use descriptive analysis to examine the specific uses of lump-sum distributions. Table 1 reports summary statistics for our sample. Nearly two-thirds of the individuals who received a lump-sum distribution were younger than age 40 at the time of the distribution, with the average age being 38. Three-quarters of the recipients were married at the time of the interview, and 50 percent of the sample is female. The majority of recipients are white and college-educated, at 90 and 65 percent, respectively, and the mean amount of uses for the distributions reported is 1.6. This sample of lump-sum recipients contains a greater percentage of whites and college educated individuals than the entire 1991–1993 SIPP topical module sample, where only 79 percent of the respondents are white, and only 50 percent are college-educated. (This information is not shown in tables.)

Table 1 also shows the mean for each of the three earnings measures. The mean earnings measured in the year of the distribution and the 5-year average earnings are quite similar, at $28,578 and $28,191, respectively. The mean value of average projected lifetime annual earnings is somewhat higher, at $33,134.

Table 1 **Demographic characteristics of persons receiving lump-sum pensions**

Characteristics	Mean
Age at receipt of distribution (years):	
25–29	25
30–39	38
40–49	21
50–59	11
60 and older	5
Women	50
Marital status:	
Married	75
Divorced	13
Widowed	2
Never married	10
Race:	
White, non-Hispanic	90
Black, non-Hispanic	5
Hispanic	3
Asian/Native American/Other	2
Highest educational level obtained:	
Less than high school (percent)	6
High school graduate	29
At least some college	65
	Mean (standard deviation in parenthesis)
Number of uses of distribution:	1.61 (1.8)
Current age	45 (10.5)
Age received distribution	38 (10.7)
Amount of distribution[1]	$14,231 (24,618)
Year of distribution receipt	1986 (6.5)
Earnings year of distribution[1]	$28,578 (18,586)
Average 5-year earnings[1]	$28,191 (17,300)
Average projected lifetime earnings[1]	$33,134 (17,702)
Househould net wealth[1]	$123,816 (246,830)
Number of observations[2]	5,469

[1] Data are in 2000 dollars.

[2]. Observations are weighted so as to represent the population of the United States as of June 1993, the 1-month the three panels overlap. Panel weights are constructed for the pooled sample using adjustment factors calculated by the Census Bureau specifically for these three panels.

NOTE: Standard deviations are in parenthesis.

SOURCE: Authors' tabulations from the 1991, 1992, and 1993 Survey of Income and Program Participation panels matched to Summary Earnings Records data.

Specific lump-sum uses in the SIPP. The SIPP asks each respondent the following question, "Did (the respondent) ever receive a lump-sum payment from any current or former pension or retirement plan provided by (the respondent's) current or former employer or union?" The individual is then asked to report the amount of the most recent distribution and how it was used. If the individuals responded that the balance was rolled over into an IRA or another employer's account, no further questions about the use of the funds were asked. However, if the respondent reported that the distribution was not rolled over, he or she is asked specifically what was done with the distribution. The respondent may have put the distribution to one or several uses, which are recorded and coded into 10 different categories.[54] If the response cannot be classified among these categories, the distribution is coded as *not determinable*. Although multiple uses of the distribution are recorded, the SIPP does not report the proportion of the distribution allocated to each use.

We classify these 10 categories as either *other saving* or *spent*. As mentioned earlier, we consider a distribution to be saved in other saving vehicles if it is used to purchase a home, placed in a savings account, invested in other investment vehicles (such as stocks or bonds), or used to finance a new business. However, if the distribution was used to pay for education, cover unemployment expenses, pay bills (or buy other items), buy a car, boat, or other vehicle, cover medical expenses, or used for everyday expenses, we categorize it as spent. Eighty-two percent (4,610 individuals)[55] of the sample reported only one use for their distribution. For simplicity and clarity, in the descriptive analysis that follows, we restrict the sample to these individuals.[56]

Table 2 reports lump-sum uses for the individuals who reported only one use. More than half of the sample respondents saved their funds in either a tax-deferred vehicle (35 percent) or another saving vehicle (17 percent). The majority of those who listed "other savings" as their use put the money into a savings account (7 percent of the sample), followed closely by those who purchased a home with their money (6 percent). For those who spent their lump sums, most individuals appear to use their distributions for day-to-day living. The most common use was *paid bills or bought other items* (24 percent),[57] followed by *everyday expenses* (12 percent). Only 1 percent used the money for either education or to pay medical bills. It does not appear that many individuals use their lump sum for "big-ticket" purchases, such as cars and boats, with only 2 percent of the sample using their distribution for these purposes.

The mean and median lump-sum amounts are also shown in Table 2. The distribution of the lump-sum amounts is skewed—mean lump-sum amounts for all uses are 2 to 3 times larger than median values. For instance, the mean value of spent distributions is $7,190, while the median value equals only $2,777. This distinction is an important one to make when evaluating the extent to which workers are consuming their retirement resources, because the amount of dollars being spent does not appear to be as great when using the median (instead of the mean) amount.

Lump-sum decisions and age. Previous research has shown that age is a factor in the lump-sum decision—younger recipients are more likely to spend their lump sums than are their older counterparts. If younger people are less likely to roll over their distributions, what are they doing with the money?

We examine this issue, and the results are summarized in Table 2, which shows the uses of lump sums, stratified by age at the time of the distribution. As would be expected, individuals who were older at the time of the distribution were much more likely to roll over their lump-sum distributions than were their younger counterparts. While only 17 percent of those aged 25 to 29 rolled over their lump sums, 56 percent of those aged 60 years and older kept their distribution in the retirement system. Not surprisingly, a larger percentage of younger individuals used their lump sum to purchase a home, although the difference is not large: 8 percent of those aged 25 to 29 years purchased a home, compared with 4 percent for those aged 60 years and older.

The labor economics literature suggests that younger workers, having not settled into a career job, typically change jobs more often than older workers do. This pattern leads to a greater number of younger workers being unemployed at any given time. Table 2 shows that younger individuals are more likely than older workers to spend their lump-sum distribution on unemployment expenses, although the total incidence of use for this purpose is small. Spending on everyday expenses also decreases as age increases, suggesting that younger individuals may be covering their basic living expenses with their lump sums. However, because the category *everyday expenses* is somewhat vague and thus could include many different kinds of uses—from going to a movie to buying food—it is not possible to determine what proportion of these uses are in fact for necessities.

Lump-sum use and amount of distribution. Table 3 breaks down the specific uses of the distributions by size. Consistent with previous research, a greater percentage of individuals with larger distributions rolled over their distributions, with 60 percent of those with distributions greater than $15,000 rolling over their lump sums, and only 16 percent of those with a distribution of $1,500 or less doing so. Likewise, a greater percentage of individuals with distributions of more than $15,000 saved their money in other saving vehicles than did those with distributions that were less than or equal to $1,500 (20 and 13 percent, respectively), although the percentage point difference between the groups is much smaller than when examining rollovers.

When comparing recipients who spent their distribution on educational or unemployment expenses; purchased a car, boat, or other vehicle; or paid medical expenses, there is very little variation in spending pattern by the amount of the distribu-

Table 2. Individuals who specified one use for their lumb sum distribution, by amount and age at distribution

Total	Amount of distribution (2000 dollars)		Percent	Age at distribution				
	Mean	Median		25–29	30–39	20–49	50–59	Older than 60
All uses	$13,999	$4,860	100	100	100	100	100	100
Rolled over[1]	22,839	10,611	36	17	34	44	55	56
Other saving[1]	13,970	6,448	17	20	17	14	16	21
Purchase home	13,590	7,610	6	8	7	5	3	4
Savings account	8,441	3,558	7	9	6	4	6	9
Invested	23,532	14,141	3	2	2	3	6	6
Start a business	21,892	12,359	2	1	2	2	1	2
Spent[1]	7,190	2,777	42	53	43	38	26	17
Education	10,901	6,053	1	<1	<1	1	<1	…
Unemployment expenses	7,780	3,575	2	3	3	3	1	1
Paid bills and/or bought other items	6,850	2,880	24	30	27	21	15	9
Bought car, boat, other vehicle	7,725	4,743	2	3	2	1	1	2
Medical expenses	7,725	2,777	1	<1	<1	<1	1	1
Everyday expenses	5,249	2,090	12	17	11	10	8	4
Not determinable[1]	10,327	3,682	6	10	6	6	3	6

[1] The sum for "Rolled over," "Other saving," "Spent," and "Not determinable" equals to 100 percent.

NOTE: There were 4,610. weighted) observations.

SOURCE: Authors' tabulations from the 1991, 1992, and 1993 Survey of Income and Program Participation panels matched to Summary Earnings Records data.

Table 3. **Individuals specifying only one use for their lump-sum distribution, by amount of distribution, and average 5-year earnings**

[In percent]

Specified Use	Total	Amount of distribution (2000 dollars)				Average 5-year earnings			
		Less than 1,500	$1,501 to $5,000	$5,001 to $15,000	More than $15,000	Less than $15,000	$15,001 to $30,000	$30,001 to $50,000	More than $50,000
All users	100	100	100	100	100	100	100	100	100
Rolled over[1]	35	16	26	37	60	19	26	43	66
Other saving[1]	17	13	15	20	20	16	19	19	13
Purchase home	6	3	5	9	7	5	8	7	4
Savings account	6	9	8	6	4	8	8	6	3
Invested	3	1	1	3	6	2	2	3	5
Start a business	2	<1	1	2	3	1	1	3	1
Spent[1]	42	63	51	36	17	56	48	32	18
Education	1	<1	<1	1	<1	<1	1	<1	1
Unemployment expenses	2	3	3	3	1	2	3	3	2
Paid bills/bought other items	24	36	30	22	10	32	26	19	11
Bought car, boat, other vehicle	2	1	3	3	1	2	2	2	<1
Medical expenses	1	1	1	<1	<1	1	<1	<1	<1
Everyday expenses	12	22	14	7	5	19	14	8	4
Not determinable[1]	6	8	8	7	3	9	7	5	3

[1] The sum for "Rolled over," "Other saving," Spent," and "Not determinable" equals 100 percent.

NOTE: Observations (weighted) equal 4,610.

SOURCE: Authors' tabulations from the 1991, 1992, and 1993 Survey of come and Program Participation panels matched to Summary Earnings Records data.

tion. In contrast, marked distinctions in the way in which the distribution is spent emerge when comparing the remaining spent categories. For example, those who received a distribution of $1,500 or less were nearly 4 times more likely to use their distribution to pay bills, buy other items, or pay everyday expenses compared with those whose distributions were greater than $15,000.

Lump-sum use and earnings. In table 3, we present our results on distribution use stratified by average 5-year earnings. We present only the 5-year earnings measure here, because the results are similar regardless of which measure is used.[58]

The tabulations in Table 3 show that lower earners tend to spend their distributions, while higher earners tend to save them. Among the individuals whose average 5-year annual earnings were less than or equal to $15,000, 19 percent rolled over their distributions; among those with average 5-year earnings greater than $50,000, two-thirds rolled over their lump-sum distributions. The majority of individuals with lower average earnings tend to use their money to pay bills, purchase other items, or pay everyday expenses. This makes sense if low earners do not make enough money to meet all of their expenses. However, low earners also tend to receive smaller lump-sum distributions, and they are younger, which also helps explain this pattern. We address this issue further in the section presenting our probit regression results.

Why examine specific lump-sum uses? What do we learn from examining the uses of lump sums by those who *do not* roll over their distributions? Several points from our descriptive analysis are worth mentioning.

When we look at both lump-sum uses in general and uses stratified by age, amount of distribution, and earnings, we see several patterns. First, most people are not using their distributions for their children's education, paying medical expenses, or purchasing homes. Nor are they using the funds for immediate needs, such as periods of unemployment.[59] Even when stratified by age, distribution amount, and earnings, unemployment and medical expense categories each constitute less than 3 percent of responses. Individuals also do not appear to be using lump-sum distributions to purchase luxury items, with only 2 percent of all workers purchasing a car, boat, or other vehicle with the money.

So what *are* those workers who do not roll over their lump sums spending the money on? In general, most people who take the distribution spend it on things contained in the following two categories: *paid off loans, bills, or spent it on other items* (24 percent) and *used for everyday expenses* (12 percent). When examining uses by age, amount of distribution, and earnings, we see similar results: Younger workers, those with smaller lump sums, and those with lower earnings tend to use their money to pay off bills or for everyday expenses more often than for the "other spending" or "other saving" categories.

The issue here is what exactly is meant by *other items*, as well as what is included in *everyday expenses*. Unfortunately, the survey combines *other items* with *paid off loans or bills*, because paying off debt can be wealth enhancing (other things being equal), while spending on other items generally is not. Because we have no way of ascertaining from the SIPP who paid bills and who purchased other items, we can only look to other evidence on this topic for some insight. Poterba and others list the uses of lump sums from the 1993 CPS, which contains a separate category for paying down debt, and find this use to be the second most common one after rolling the distribution over.[60] Hence, it is probable that many of these individuals did in fact use the lump sum to pay down debt, which can increase net worth and resources for retirement.

Examining those who report one or more uses. Thus far in our descriptive analysis, we have examined only lump-sum use for individuals who reported *one* use for their distribution. In this subsection, we include all lump-sum recipients in our analysis, including those with multiple uses, but we aggregate the responses into just two categories—*saved* and *spent*—in order to make a clearer presentation. We use two different definitions of what constitutes *saved*, because other saving (such as stocks and bonds) may add to retirement wealth and could be considered saving for retirement along with rollovers.

The two definitions of saving include a narrow definition that contains only rollovers, and a broader definition that includes both rollovers and other saving. Recall that the survey did not ask additional uses of the lump sum for individuals who reported rolling over their distribution, and as a result they necessarily can have only one recorded use for their distribution. However, the SIPP questionnaire is designed in such a way that those who reported using their distributions for other saving could also have reported either spending the distribution and/or using the distribution for uses coded as *not determinable*. The survey does not report the proportion of the distribution saved for those who save only part of the money—hence, for our purposes, we classify a person as having saved his distribution if he or she reports at least one use as other saving.[61] Henceforth, we group together those who saved their whole distribution and those who saved only a portion of it under the heading "saved."

Using the more narrow definition of saving, 31 percent of respondents saved their distribution. (See table 4.) This percentage greatly increases under the broader definition, to 58 percent. Burnam and others find similar results when using the narrow definition of saving in their analysis of the 1993 CPS: 33 percent of individuals rolled over their entire distribution, while 7 percent rolled over only a portion of it.[62]

Table 4 also shows lump-sum use by individual characteristics. Using either definition of saving for lump sums, the proportion of saving increases with the amount of the distribution, level of education, current household net wealth, and age. Divorced respondents have a smaller incidence of lump-sum saving than do married, widowed, or never married individuals. This difference widens when using the broad definition of saving. We also find that a greater percentage of whites (white, non-Hispanic) and "other" races (including Asians and Native Americans) save their distributions than of blacks (black, non-Hispanic) or Hispanics, with a difference of as much as 19 percentage points using the narrow definition of saving.

A greater percentage of individuals with higher earnings also save their distributions, compared with those with lower earnings, regardless of what earnings measure or definition of saving is used. Table 4 shows that the proportion of respondents who save their lump-sum distributions increases substantially as earnings increase, although the increase is not quite as large for the projected lifetime earnings measure as it is for the 1-year or 5-year earnings measures. Under the broader definition of saving, for example, we see an increase from 47 to 80 percent for low to high earners when using annual earnings, and an increase from 46 to 82 percent when using average 5-year earnings. However, when using projected annual earnings, the increase is from 47 to 73 percent.

Of course these tabulations only tell part of the story, given that many of these variables may be correlated with one another. We are particularly interested in the earnings variables and whether the time period of earnings makes a difference in the decision to save or spend a lump-sum distribution. In the past few years, much attention has been paid to research findings suggesting that low income individuals tend to spend their lump sums, while higher earners tend to roll theirs over. In the next section, we use a probit model to assess whether the effects of earnings on lump-sum use remains strong when using the different earnings measures.

Probit model of lump-sum use

We now examine the characteristics of those who save lump sums by estimating a multivariate probit model. We estimate our model separately using both the narrow and broader definitions of saving used in table 4, with the dependent variable taking on the value of 1 if the distribution was saved, and 0 otherwise. Omitting individual subscripts, we model the decision to save or spend a distribution as

$$Y_j^{\bullet} = \beta_{0j} + \beta_{yj} X + \varepsilon_j; \qquad \text{(1a)}$$

where $Y_j^{\bullet}$ is the difference in utility for the worker depending on whether or not he saves his distribution, β_{0j} is a constant, and ε_j is an error term. X is a vector of demographic and financial variables thought to affect lump-sum use and includes age at time of the distribution, marital status, race, gender, highest educational level obtained, amount of distribution, and total household net wealth.[63, 64] The model is estimated separately depending on whether we use average 5-year earn-

Table 4. Characteristics of persons distributing lump-sum benefits using using narrow and broad definitions of savings

[In percent]

Characteristics	Narrow definition		Broad definition	
	Saved[1]	Spent	Saved[2]	Spent
All workers	31	69	58	39
Gender:				
Female	28	72	52	48
Male	34	66	63	37
Race:				
White	32	68	59	41
Black	13	87	43	57
Hispanic	20	80	45	55
Asian/Native American/Other	32	68	57	43
Age at time of distribution:				
25–29	16	84	45	55
30–39	30	70	56	44
40–49	38	62	62	38
50–59	48	52	73	27
60 and older	44	56	79	21
Marital status:				
Married (including separated)	32	68	60	40
Divorced	24	76	42	58
Widowed	31	69	62	38
Never married	31	69	58	42
Highest educational level obtained:				
Less than high school degree	21	79	42	58
High school degree	25	75	53	47
College degree/Some college	35	65	61	39
Amount of distribution:				
Less than or equal to $1,500	15	85	37	63
$1,501–$5,000	24	76	48	52
$5,001–$15,000	33	67	64	36
More than $15,000	50	50	80	20
Annual earnings year of distribution:				
Less than or equal to $15,000	20	80	47	49
$30,001–$50,000	36	64	64	36
More than $50,000	56	44	80	20
Five-year average earnings:				
Less than or equal to $15,000	17	83	46	54
$15,001–$30,000	23	77	50	50
$30,001–$50,000	38	62	65	35
More than $50,000	60	40	82	18
Average projected lifetime earnings:				
Less than or equal to $15,000	19	81	47	53
$15,001–$30,000	22	78	48	52
$30,001–$50,000	36	64	63	37
More than $50,000	49	51	73	27
Total household net wealth:				
Less than or equal to $15,000	13	87	34	66
$15,001–$65,000	24	76	50	50
$65,001–170,000	35	65	64	36
More than $170,000	48	52	78	22

[1] Under the narrow definition, a distribution is considered "saved" if the whole distribution was rolled over.

[2] Under the broad definition, a distribution is considered "saved" if at least part of the distribution was rolled over or put into other saving.

NOTE: Observations (weighted) equal 5,168. "Amount of distribution," "Current household net wealth," and all earnings variables are in 2000 dollars.

SOURCE: Authors' tabulations from the 1991, 1992, and 1993 Survey of Income and Program Participation panels matched to Summary Earnings Records data.

ings, average projected lifetime annual earnings, or earnings for the year of the distribution. The chosen measure of earnings for each specification is also included in X.

If $Y^*>0$, the individual saves the lump sum; hence $Y=1$ for those observed to save the lump sum, 0 otherwise. The subscript j equals 1 or 2, depending on the use of the narrow or broad definition of saving. Thus, the probability that a person saves a lump sum can be written as

$$P(Y_j=1|X) = \Phi(\beta_{0j} + \beta_{xj}X); \qquad (1b)$$

where Φ(.) denotes the cumulative normal distribution. We estimate equation (1b) for both definitions of saving.

Tables 5 reports the estimates of equation (1b) for three separate specifications, each using a different earnings measure, and both definitions of saving. The results using the earnings for the year of the distribution are shown in columns (1) and (3), those using the 5-year earnings measure are shown in columns (2) and (5), and those using average projected lifetime annual earnings are shown in columns (3) and (6). Because macroeconomic conditions and tax laws have varied over the years, we also include dummy variables for the year of the distribution (not shown in the tables).[65] An F test for the joint significance of the year dummies reveals they are highly statistically significant, with a p-value of less than 0.01.[66] Because most of these estimates are similar in magnitude and statistical significance among the different earnings specifications, for simplicity, we discuss only the estimates from the first column of each table in detail.[67] Further, we estimate the specifications both with and without weights and find that the difference in the estimates does not affect our conclusions; thus, for computational ease, we present unweighted results.[68]

Table 5 shows that, regardless of the definition of saving used, those with larger distribution amounts are more likely to save their distributions, and this effect is large and highly statistically significant in all specifications, using either definition of saving. College graduates are also more likely to save their lump sums than are high school graduates or those who have not attained at least a high school diploma, with a 9 percent greater probability using the narrow definition of saving and an 18 percent greater probability when using the broader one.

We also find that current household net wealth is an important predictor of lump-sum use, with the largest difference in the likelihood of saving (34 percent using either definition of saving) between those with the lowest and highest levels of wealth. All wealth effects are estimated with a p-value of less than 0.01. Given that this is a measure of wealth at the time of the interview (versus wealth at the time of the distribution), it is probable that this variable may be serving as a proxy for some sort of taste for saving in this model.

Table 5 also shows that marital status, gender, and age at time of the distribution are also statistically significant, although the results vary depending on what definition of saving is used. Never-married individuals have a 6 percent greater likelihood than married individuals of saving their distributions, regardless of the definition of saving used, while divorced respondents are 8 percent less likely to save their lump sums, but only when defining saving broadly. In addition, women are 5 percent *more* likely to save their distributions than men when using the narrow definition of saving. This result is surprising, considering other studies of lump-sum use have either found no "gender effect," or they have found that women have a *lower* probability of saving their lump-sum distributions.[69]

As age at the time of the distribution increases, the likelihood of saving the distribution increases (up to age 60), but this effect is statistically significant for all age dummy variables only when using the narrow definition of saving. The fact that we see significant effects for age *only* when looking at rollovers makes sense, given that tax-deferred vehicles may not be as attractive to younger individuals because of the decreased liquidity during the early stage of the life cycle.[70]

The differences in lump-sum saving we saw in the earlier descriptive analysis with regard to race also remain when examining the probit estimates. The degree to which blacks and Hispanics (relative to whites) are less likely to save their lump sums differs depending on the definition of saving used. Using the narrow definition, blacks have a 14 percent lower probability of rolling over their distribution than do whites, with Hispanics being 10 percent less likely than whites to roll over their lump sum. This difference decreases for blacks and increases for Hispanics when using the broad definition of saving, with blacks being 8 percent and Hispanics 14 percent less likely than whites to save their distribution. Interestingly, only Purcell—the only other lump-sum study we know of that also uses the SIPP—also found that whites were more likely than blacks to save their distributions.[71]

The results in table 5 suggest that regardless of which earnings measure is used, the likelihood of saving a distribution increases as earnings increase. There is one exception to this, however, when looking at the lower earners. For the specification using average 5-year earnings (and the broad definition of saving) and the specifications using projected lifetime earnings (both definitions of saving), there is no significant difference in the likelihood of saving a lump sum between individuals who earned between $15,000 and $30,000 annually and those who earned less than $15,000 (the group omitted here).

Why might these lower average lifetime earners *not* follow the same pattern as their higher earning counterparts? One possibility lies in the mechanics of actually creating the average projected lifetime annual earnings variable used in this analysis. Higher earners generally have more education and labor force stability than lower earners, which makes their lifetime earnings path easier to project and thus probably more accurate than the projections for lower earners. Measurement error typically biases an estimate towards zero and thus leads to estimates that are not statistically significant.

Another possibility is that lower wage workers simply are not as cognizant of their expected lifetime earnings and therefore do not look to them in making their lump-sum decisions. Instead, they may pay more attention to their financial situation at the time of the distribution, as everyday consumption needs tend to be more pressing for individuals in this lower

Table 5. Probit estimates of the probability of saving a lump-sum distribution, by individual characteristics and earnings variable

Characteristic	Narrow definition of saving[1]			Broad definition of saving[2]		
	Earnings in year of distribution[3] (1)	Average earnings 5-years before distribution[3] (2)	Average projected lifetime earnings[3] (3)	Earnings in year of distribution[3] (4)	Average earnings 5-years before distribution[3] (5)	Average projected lifetime earnings[3] (6)
Age received distribution (base under 30):						
30–40	.04 (.02)+	.02 (.02)	.06 (.02))	–.01 (.02)	–.02 (.02)	.005 (.02)
40–50	.06 (.02)**	.05 (.02)*	–.007 (.02)	–.007 (.02)	–.01 (.02)	.03 (.02)
50–60	.09 (.03)**	.06 (.03)*	.07 (.03)*	.07 (.03)*	.05 (.03)***	.10 (.03)**
Older than 60	–.008 (.04)	–.05 (.03)	.07 (.05)	.07 (.05)	.03 (.05)	.09 (.04)***
Female	.05 (.02)**	.04 (.02)**	–.01 (.02)	–.01 (.02)	–.03 (.02)***	–.003 (.02)
Marital status (base married, including separated):						
Divorced	–.008 (.02)	–.006 (.02)	–.08 (.02)**	–.08 (.02)**	–.06 (.02)**	–.08 (.02)**
Widowed	.02 (.05)	.03 (.05)	.03 (.05)	.03 (.05)	.02 (.04)	.04 (.05)
Never married	.06 (.03)**	.07 (.03)**	.06 (.03)*	.06 (.03)*	.07 (.02)**	.05 (.03)*
Race (base white, non-Hispanic):						
Black, non-Hispanic	–.14 (.03)**	–.14 (.03)**	–.08 (.04)*	–.08 (.04)*	–.08 (.04)*	–.08 (.04)*
Hispanic	–.10 (.03)**	–.10 (.03)**	–.14 (.05)**	–.14 (.05)**	–.14 (.05)**	–.13 (.05)**
Asian/Native American/Other	–.05 (.04)	–.06 (.04)	–.06 (.06)	–.06 (.06)	–.06 (.06)	–.05 (.06)
Highest educational level (base: no degree):						
High school degree	.03 (.03)	.03 (.03)	.13 (.03)**	.13 (.03)**	.14 (.03)**	.14 (.03)**
College degree/some college	.09 (.03)**	.10 (.03)**	.18 (.03)**	.18 (.03)**	.19 (.03)**	.18 (.03)**
Amount of distribution[4] (base less than $1,000):						
$1,000–$5,000	.13 (.02)**	.12 (.02)**	.09 (.02)**	.09 (.02)**	.09 (.02)**	.09 (.02)**
$5,000–$15,000	.20 (.02)**	.20 (.02)**	.22 (.02)**	.22 (.02)**	.22 (.02)**	.22 (.02)**
More than $15,000	.31 (.03)**	.30 (.03)**	.33 (.02)**	.33 (.02)**	.33 (.02)**	.33 (.02)**
Earnings (base: less than$15,000):						
$15,000– $30,000	.06 (.02)**	.04 (.02)*	.06 (.02)**	.06 (.02)**	.02 (.02)	.008 (.02)
$30,000–$50,000	.15 (.02)**	.12 (.02)**	.11 (.02)**	.11 (.02)**	.06 (.02)**	.09 (.02)**
More than $50,000	.20 (.03)**	.16 (.03)**	.14 (.02)**	.14 (.02)**	.09 (.03)**	.15 (.03)**
Total household net wealth[4] (base less than $15,000):						
$15,000–$65,000	.13 (.02)**	.13 (.02)**	.12 (.02)**	.12 (.02)**	.12 (.02)**	.12 (.02)**
$65,000–170,000	.23 (.02)**	.24 (.02)**	.22 (.02)**	.22 (.02)**	.23 (.02)**	.22 (.02)**
More than $170,000	.34 (.02)**	.34 (.02)**	.34 (.02)**	.34 (.02)**	.34 (.02)**	.33 (.02)**
Pseudo R^2	.19	.19	.18	.18	.17	.18
Log likelihood	–2569	–2584	–2861	–2861	–2874	–2858

[1] Estimates (unweighted) = 5,114.

[2] Estimates (unweighted) = 5,140.

[3] F tests for joint statistical significance of earnings variables:
column 1: 72.7, p-value=0.0;
column 2: 42.7, p-value=0.0;
column 3: 104.2, p-value=0.0;
column 4: 36.8, p-value=0.0;
column 5: 11.0, p-value=0.1;
column 6: 44.0, p-value=0.0.

All specifications include year dummy variables for the year the distribution was received.

NOTE: Robust standard errors are in parenthesis.
** significant at the 1-percent level
* significant at the 5-percent level
*** significant at the 10-percent level

[4] "Amount of distribution"; "earnings in year of distribution"; "average 5-year earnings"; "projected lifetime earnings"; and "household net wealth" are in 2000 dollars.

Estimates (unweighted) = 5,114.

earnings category than for higher earners. Lower earners also are more likely to be "liquidity constrained" (unable to borrow money), which may make a lump-sum distribution appear that much more appealing as a way to meet current expenses.

To investigate this possibility further, we modify equation (1b) to include all three of the earnings measures in X. This modification is necessary to control for the fact that an individual may be classified into different earnings categories, depending on which earnings measure is used.[72]

Table 6 reports the results for both definitions of saving. We estimated the two regressions using all three earnings variables and found that none of the average 5-year earnings variables were statistically significant, so we eliminated that measure from the final specification presented in Table 6. Column (1) reports the results using the narrow definition of saving, and column (2) presents the results using the broader measure.

The results are similar to those in table 5 with regard to lower earners. Individuals who earned $15,000 to $30,000 in the year of the distribution—regardless of average projected lifetime annual earnings—are 4 to 5 percent more likely (depending on the definition of saving) to save their distribution than those who earned less than $15,000, with p-values of less than 0.05.

These results suggest that lower earners are looking more at their earnings at the time of the distribution than at either past earnings or expected lifetime annual earnings in making lump-sum decisions. This conclusion seems plausible given that these individuals are more likely than higher earners to have immediate consumption needs. It is also possible, however, that lower earners put the same weight as higher earners on their earnings at the time of the distribution, but the lower earners have greater year-to-year earnings deviations from the lifetime path of earnings than do middle and upper earners. Lower earners may thus appear to put a greater emphasis on earnings at the time of the distribution, although, in reality, their lifetime earning paths are just noisier.

THE FOCUS OF OUR PAPER IS TWOFOLD: to identify what spenders of lump sums are doing with their distributions, and determine what characteristics affect the saving/spending decision, focusing on three different measures of earnings. In our descriptive analysis, we find that most individuals save some portion of their distribution in either a tax-deferred or other saving vehicle, and those that do spend the distribution typically have much smaller distribution

Table 6. Probit estimates of the probability of saving a lump-sum distribution including both earnings the year of the distribution and average projected lifetime earnings, by individual characteristic

Characteristic	Narrow definition of saving (1)	Broad definition of saving (2)
Age received distribution (base under 30):		
30–40	.05 (.02)**	−.0008 (.02)
50–60	.14 (.03)**	.09 (.03)**
Older than 60	.03 (.04)	.09 (.04)*
Female	.08 (.02)**	.003 (.02)
Marital status (base married, including separated):		
Divorced	−.009 (.02)	−.08 (.02)*
Widowed	.03 (.05)	.03 (.05)
Never married	.06 (.03)*	.06 (.03)*
Race (base White, non-Hispanic):		
Black, non-Hispanic	−.14 (.03)**	−.08 (.04)*
Hispanic	−.10 (.03)*	−.13 (.05)**
Asian/Native American/Other	−.05 (.04)	−.05 (.09)
Highest educational level (base no degree):		
High school degree	.03 (.03)	.13 (.03)**
College degree/Some college	.08 (.03)**	.18 (.03)**
Amount of distribution (base less than $1,000)		
$1,000–$5,000	.12 (.02)**	.09 (.02)**
$5,000–$15,000	.19 (.02)**	.22 (.02)**
More than $15,000	.29 (.03)**	.33 (.02)**
Earnings, year of distribution (base less than $15,000):		
$15,000–$30,000	.04 (.02)*	.05 (.02)**
$30,000–$50,000	.11 (.02)**	.08 (.02)**
More than $50,000	.10 (.03)**	.10 (.03)**
Earnings, average projected lifetime (base less than $15,000):		
$15,000–$30,000	.01 (.02)	-.01 (.02)
$30,000–$50,000	.11 (.03)**	.06 (.03)*
More than $50,000	.18 (.04)**	.10 (.03)**
Total household net wealth (base less than $15,000)		
$15,000–$65,000	.12 (.02)**	.11 (.02)**
$65,000–170,000	22 (.02)**	.22 (.02)**
More than $170,000	.33 (.02)**	.33 (.02)**
Pseudo R^2	.20	.18
Log likelihood	−2548	−2852
Observations	5,114	5,140

NOTE: Estimates are unweighted. Specifications include year dummy variables for the year the distribution was received.
Robust standard errors in parenthesis:

** significant at the 1-percent level
* significant at the 5-percent level

amounts. Additionally, spenders do not purchase "big-ticket" items such as cars or boats with their lump sums, nor are they using the money for medical, unemployment or educational expenses. Most spenders are using the money to pay down debt, purchase other items, and cover everyday expenses. These patterns persist even after stratifying uses by age, amount of the distribution, and average earnings.

In the latter portion of the article, we use a probit model to examine characteristics associated with lump-sum disposition and the role that earnings has in predicting lump-sum distribution use. Estimates—using either definition of saving—show a strong positive correlation between the amount of the distribution and saving the distribution, as well as an increase in the likelihood of saving the money as the level of education increases. Blacks and Hispanics are less likely than whites to save their distributions, regardless of the definition of saving used. We also find that women are more likely than men to roll over their lump sums, but only for the more narrow definition of saving.

For individuals who earn more than $30,000 annually, our earnings estimates follow a similar pattern to other lump-sum studies—higher earners are more likely to save their distributions, regardless of the definition of saving used. However, when examining estimates for individuals who make less than $30,000 annually, only earnings *in the year of the distribution* are positively correlated with lump-sum use. Lifetime earnings have no role in explaining lump-sum use for lower earners. As we explained earlier, these insignificant estimates could be the result of downward bias of the lifetime earnings estimate due to measurement error in projecting lifetime earnings.

On the other hand, these estimates could suggest that lower earners are making lump-sum decisions based more on their short-term financial situation than on taking a more long-term view. If this is indeed the case, then lower earners either have a true financial need at the time of the distribution and find it in their best interest to consume the distribution, or they may be taking a myopic view of the future and retirement planning. We see in the tabulations that distributions are not being spent on everyday needs related to unemployment expenses or medical bills, but beyond that, it is difficult to discern what classification most spenders fall into. What exactly makes up the two most common consumption uses coded in the SIPP—*paying off debt or buying other things* and *using for everyday expenses*—is not very clear. Whether financial necessity is in fact a predominant issue in lump-sum consumption would depend on whether the majority of people in the first response category were actually paying off debt, or if they were just purchasing non-necessities. It also depends on what one considers to be an everyday expense; using the money to pay rent certainly describes a different degree of necessity than using it to purchase a stereo system.

What implications do our findings have for the issue of the availability and use of lump sums? First, data that more clearly define the categories of lump-sum spending are needed if we are to gain a better understanding of what motivates people to spend their distributions. Detailed questions that directly ask why a distribution was spent also would be helpful. The upcoming 1996 SIPP panel, which provides for more detailed responses to the question on lump-sum use, should provide more clarity with regard to exact lump-sum uses.

Informing individuals of the importance of planning for retirement may also influence lump-sum use. If it is true that many lump-sum spenders simply are not thinking ahead far enough to plan for retirement, educating them on the importance of retirement saving and on such financial topics as the benefits of compound interest may affect their behavior. Leslie A. Muller found that younger individuals were more likely to save lump sums if they took a retirement class,[73] and Douglas B. Bernheim and Daniel M. Garrett found a positive correlation between employer-sponsored retirement education and overall saving rates.[74] As new studies on the effects of retirement education are published, we will be better able to determine the degree to which educating individuals affects their lump-sum behavior. □

Notes

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[1] *Income of the Population 55 or Older* (Social Security Administration, Office of Research and Statistics, 1996).

[2] John R. Woods, "Pension Benefits Among the Aged: Conflicting Measures and Unequal Distribtuions," *Social Security Bulletin*, Fall 1996, pp. 3–30.

[3] John Sabelhaus and David Weiner, "Disposition of Lump-Sum Pension Distributions: Evidence from Tax Returns," *National Tax Journal*, September, 1999, pp. 593–613.

[4] William F. Bassett, Michael J. Fleming, and Anthony P. Rodrigues, "How Workers Use 401(k) Plans: The Participation, Contribution, and Withdrawal Decisions,"*National Tax Journal*, June 1998.

[5] "The Pension Benefit Guaranty Corporation (PBGC) is a Federal corporation created by the Employee Retirement Income Security Act of 1974 (ERISA) to encourage the continuation and maintenance of defined benefit pension plans, provide timely and uninterrupted payment of pension benefits to participants and beneficiaries in plans covered by PBGC, and keep pension insurance premiums at the lowest level necessary to carry out objectives"; from the PBGC website, on the Internet at **http://www.pbgc.gov**.

[6] *Employee Benefits in Medium and Large Firms, 1989*, Bulletin 2336 (Bureau of Labor Statistics, 1990); *Employee Benefits in Medium and Large Private Establishments, 1997*, Bulletin 2517, (Bureau of Labor Statistics, September 1999).

[7] For a more compete description of cash balance plans, see Kenneth R. Elliott and James H. Moore, Jr., "Cash Balance Pension Plans: The New Wave," *Compensation and Working Conditions*, Summer, 2000, pp. 3–12.

[8] *Employee Benefits in Medium and Large Private Establishments, 1993*, Bulletin 2456, (Bureau of Labor Statistics, 1995); *Employee Benefits in Medium and Large Private Establishments, 1997*, Bulletin 2517, (Bureau of Labor Statistics, September 1999).

[9] For more on the growth of defined contribution plans, see Richard P. Hinz and John A. Turner, "Pension Coverage Initiatives: Why Don't Workers Participate?" in Olivia S. Mitchell and Sylvester Schieber, eds., *Living with Defined Contribution Pensions: Remaking Responsibility for Retirement* (Philadelphia, PA, University of Pennsylvania Press, 1998); Gary Klunman, Asokan Anadarajan, and Kenneth Lawrence, "An Analysis of the Move Toward Defined Contribution Plans: Are the Rewards Commensurate with the Risks?" *Journal of Pension Planning and Compliance*, Fall, 1999, pp. 61–89; Olivia S. Mitchell, "Developments in Pensions," *NBER Reporter* (National Bureau of Economic Research, 1998); Leslie E. Papke, "Are 401(k) Plans Replacing Other Employer-Provided Pensions? Evidence from Panel Data," *Journal of Human Resources*, Spring 1999, pp. 346–68; Leslie E. Papke, Mitchell Peterson, and James M. Poterba, "Do 401(k) Plans Replace Other Employer-Provided Pensions?"*Advances in the Economics of Aging* (Chicago and London, National Bureau of Economic Research Project Report Series, 1996), pp. 219–36.

[10] *Employee Benefits in Medium and Large Private Establishments, 1993*, Bulletin 2456, (Bureau of Labor Statistics, 1995); *Employee Benefits in Medium and Large Private Establishments, 1997*, Bulletin 2517, (Bureau of Labor Statistics, September 1999).

[11] Vesting refers to the amount of time an individual must work before earning a nonforfeitable right to their accrued benefit. When an individual is fully vested, the accrued benefit is the amount they are eligible to receive when they separate from the employer. Employers may provide different vesting schedules as long as it meets the minimum requirements set by ERISA for counting vesting service.

[12] Employers may want to cash out relatively small balances for two reasons: the relatively high administrative cost of maintaining records on former employees with small balances, and the requirement that employers pay premiums to the Pension Benefit Guarantee Corporation (PBGC) for these accounts. PBGC premiums are paid per employee, which makes holding a small balance that much more costly to the employer. See Patrick J. Purcell, "Lump-Sum Distributions and Retirement Income Security," *Journal of Pension Planning and Compliance*, Fall, 2000, pp. 27–60; "Cashing Out Terminated Participants' Vested Benefits Simplifies Plan Administration, Reduces PBGC Premiums," *Spencer's Research Reports* (Chicago, IL, Charles D. Spencer and Associates, October 3, 1997); and the website of Charles D. Spencer and Associates, on the Internet at **www.spencernet.com**.

[13] Technically, leaving the money in the former employer's plan is not "rolling over" or "transferring" any funds. We classify this use as a rollover in keeping with the general definition of maintaining the funds in a tax-deferred plan.

[14] The Health and Retirement Study (HRS)—sponsored by the National Institute on Aging (part of the National Institutes of Health) and conducted by the University of Michigan's Institute for Social Research—is designed "to provide data for researchers, policy analysts, and program planners who are making major policy decisions that affect retirement, health insurance, saving and economic well-being" (from the HRS website, on the Internet at **www.umich.edu/~hrswww/index.html**).

[15] Michael D. Hurd, Lee Lillard, and Constantijn Panis, "An Analysis of the Choice to Cash-Out, Maintain, or Annuitize Pension Rights at Job Change or Retirement.," *RAND Working Paper* DRU–1979–DOL, October 1998.

[16] Angela E. Chang, "Tax Policy, Lump-Sum Pension Distributions, and Household Saving," *National Tax Journal*, June 1996, pp. 235–52.

[17] High-income workers are those with annual incomes exceeding $39,999 (in 1987 dollars).

[18] Chang, "Tax Policy, Lump-Sum Pension Distributions, and Household Saving." Chang uses two models to estimate the penalty's effect; this result is using a difference-in-difference approach. She also presents a standard probit, which estimates that a 1-percent increase in the tax rate increases the rollover probability by 0.4 percentage point for high-income individuals and 0.2 percentage points for low-income individuals.

[19] *Ibid.*

[20] Internal Revenue Code (IRC) §3405 9 (c) (1).

[21] Whether the individual gets back the 20-percent withheld ultimately depends on whether he has overpaid in total income taxes for that year. This is the case regardless of whether he re-invests the money in a tax-deferred instrument within 60 days.

[22] Paul Fronstin and others, "Lump-Sum Distributions and Rollovers," in Deborah Holmes, ed., *EBRI Databook on Employee Benefits* (Washington, DC, Employee Benefit Research Institute, 1997), pp. 135–40.

[23] The Retirement Confidence Survey (RCS) is conducted by the Employee Benefits Research Institute (EBRI): "Since 1991, the RCS has tracked Americans' financial preparations for retirement and their attitudes regarding retirement. The RCS is a random, nationally representative survey of 1,000 Americans over age 25. Both current workers and current retirees are surveyed; this allows comparisons across generations in terms of attitudes and financial preparations. The survey contains a core set of questions that is asked annually and is used to track key attitudes and behavior patterns over time. The survey also strives to be timely by covering issues that are of current interest to policymakers and retirement benefits specialists; examples include participant education in 401(k) plans, public attitudes regarding Social Security reform, and individual's attitudes regarding investing for retirement"; from the RCS page of the EBRI website, on the Internet at **http://www.ebri.org/**.

[24] Leonard E. Burman, Norma B. Coe, and William G Gale, "Lump-Sum Distributions from Pension Plans: Recent Evidence and Issues for Policy and Research," *National Tax Journal*, September 1999, pp. 553–62.

[25] Patrick J. Purcell, "Lump-Sum Distributions and Retirement Income Security."

[26] Leonard E. Burman and others, "Lump-Sum Distributions from Pension Plans."

[27] *Ibid.*

[28] Paul Yakoboski, "Large Plan Lump-Sums: Rollovers and Cashouts," *EBRI Issue Brief*, No. 188 (Washington, DC, Employee Benefit Research Institute, August 1997).

[29] *Ibid.*

[30] Sabelhaus and Weiner, "Disposition of Lump-Sum Pension Distributions."

[31] See, for example, William F. Bassett and others, "How Workers Use 401(k) Plans"; James M. Poterba, Steven F. Venti, and David A. Wise, "Lump-Sum Distributions from Retirement Savings Plans: Receipt and Utilization," in David A. Wise, ed., *Inquiries in the Economics of Aging* (Chicago, University of Chicago Press, 1998) pp. 85–108; and Leonard E. Burman and others, "Lump-Sum Distributions from Pension Plans."

[32] William F. Bassett and others, "How Workers Use 401(k) Plans."

[33] Patrick J. Purcell, "Lump-Sum Distributions and Retirement Income Security."

[34] Gary V. Englehardt, "Pre-Retirement Lump-Sum Pension Distributions and Retirement Income Security: Evidence from the Health and Retirement Study," *Aging Studies Program Paper* No. 23 (Syracuse University, Maxwell School of Citizenship and Public Affairs, Center for Policy Research, June 2001).

[35] James M. Poterba and others, "Lump-Sum Distributions from Retirement Savings Plans."

[36] Michael D. Hurd, Lee Lillard, and Constantijn Panis, "An Analysis of the Choice to Cash-Out, Maintain, or Annuitize Pension Rights at Job Change or Retirement.," *RAND Working Paper* DRU–1979–DOL, October 1998.

[37] It also should be noted that the only older individuals (aged 51–61 in 1992) are in the HRS sample, which makes the statistics on the number of rollovers and amount of rollovers naturally higher (than the CPS or SIPP), because the likelihood of rollovers and size of the distribution have been shown to increase with age.

[38] See Michael D. Hurd and others, "An Analysis of the Choice to Cash-Out"; William F. Bassett and others, "How Workers Use 401(k) Plans"; James M. Poterba and others, "Lump-Sum Distributions From Retirement Saving Plans"; and Patrick J. Purcell, "Lump-Sum Distributions and Retirement Income Security."

[39] Poterba and others, "Lump-Sum Distributions From Retirement Saving Plans."

[40] *Ibid.*; Purcell, "Lump-Sum Distributions and Retirement Income Security."

[41] Poterba and others, "Lump-Sum Distributions From Retirement Saving Plans."

[42] Purcell, "Lump-Sum Distributions and Retirement Income Security."

[43] Poterba and others, "Lump-Sum Distributions From Retirement Saving Plans"; William F. Bassett and others, "How Workers Use 401(k) Plans."

[44] Purcell, "Lump-Sum Distributions and Retirement Income Security."

[45] Poterba and others, "Lump-Sum Distributions From Retirement Saving Plans"; Purcell, "Lump-Sum Distributions and Retirement Income Security."

[46] Poterba and others, "Lump-Sum Distributions From Retirement Saving Plans."

[47] The 1993 panel is the most recent SIPP pension data available at this time.

[48] We also construct some of our variables from the core files and the Work History topical module.

[49] The pooled weight we use was constructed to reflect the U.S. population for the one month in which all three panels overlap, which is June 1993. The Pension topical module itself, which is fielded in wave 7 in 1991, wave 4 in 1992, and wave 9 in 1993, does not overlap in any one month. For more information on the construction of the weights, contact the authors.

[50] "The Consumer Price Index (CPI) measures the average change in the prices paid by urban consumers for a fixed market basket of goods and services. The Bureau of Labor Statistics (BLS) calculates the CPI monthly and publishes it about 2 weeks after the end of the month to which it refers." The CPI often is used as a "deflator" to convert *current* dollars to *constant* dollars. For more information on the CPI, see "The Consumer Price Index," in *BLS Handbook of Methods*, Bulletin 2490 (Bureau of Labor Statistics, April 1997), ch. 17, pp. 167–230; quote, p. 167.

[51] There were 54,581 individuals in the 1991–93 panels interviewed for the Pension topical module, of which 6,851 said they had received at least one lump-sum distribution from a previous plan. Of these 6,851 respondents, 29 percent (1,958 individuals) were drawn from the 1991 panel, 37 percent (2,568 individuals) were drawn from the 1992 panel, and 34 percent (2,325 individuals) were drawn from the 1993 panel.

[52] The most common reason why an SER record is not matched is because the respondent did not give the Bureau of the Census permission to use his Social Security number to link his SIPP record to his earnings in the SER.

[53] Individuals employed in jobs not covered by Social Security have zeros in the SER data for that year, because these earnings do not have to be reported to the Social Security Administration. We drop these individuals with no earnings in the year of the distribution because zero may not accurately reflect their earnings for that year. The SIPP does not report earnings other than those at the time of the interview.

[54] The categories as they are coded in the SIPP are as follows: rolled over the funds into an IRA or put them into another (or same) pension or retirement plan; purchased a home or paid off a mortgage; put it in a savings account; invested it in some other instrument (e.g., stocks, money market accounts); used it to start or purchase a business; used it for children's education; used it for a period of unemployment; paid off loans, bills, or spent it on other items; bought a car, boat, or other vehicle; paid medical or dental expenses; used it for general everyday expenses.

[55] There actually were 4,617 individuals who gave one use for their distribution, but 7 of these individuals did not report either the year of the distribution or the amount of the distribution. Because two of the characteristics we focus on in the descriptive analysis are *age at the time of the distribution* and *amount of the distribution*, we drop these 7 individuals because we lack sufficient information on these characteristics for them.

[56] Interested readers may obtain tables describing lump-sum uses for individuals having one or multiple uses for their distributions in appendix A, which is not printed here, but is available directly from the authors. We chose to include data on multiple responses in an appendix and focus on limiting the sample to one use for two reasons. First, we are able to express the percentages using individuals (rather than *responses*), which enables the reader to more readily compare our results with those of other research. We also noticed that workers who used the distribution in multiple ways tended to use part of the distribution in many of the same ways—namely, in the category of *paid bills/other expenses* and *everyday expenses*. Because we don't know the percentage put to these uses, it is difficult to compare the uses with one another in a meaningful way.

[57] We classify *paid bills/bought other items* as consumption because we cannot distinguish between those who used the distribution to pay off loans (saving) or who spent it on other items (consumption).

[58] Lump-sum uses categorized by earnings for the year of the distribution and for average projected lifetime annual earnings can be found in Appendix B, which is not published here, but is available from the authors upon request.

[59] Chang found similar results using the 1988 CPS, with 7 percent of the sample using their lump sums to fund unemployment. Angela E. Chang, "Tax Policy, Lump-Sum Pension Distributions, and Household Saving."

[60] Poterba and others, "Lump-Sum Distributions From Retirement Saving Plans."

[61] For example, suppose an individual reported three uses for his lump sum: purchased stocks, purchased a car, and gave an answer coded as "undeterminable." This individual would not be classified as having saved his distribution using the more narrow definition of saving, but under the broader definition, he *would be* considered to have saved the distribution.

[62] Leonard E. Burman and others, "Lump-Sum Distributions from Pension Plans."

[63] Both marital status and total household net wealth are for the period at the time of the interview.

[64] In previous lump-sum studies, race and marital status have not been shown to be correlated with lump-sum disposition. However, since these demographic measures are often found to affect savings behavior,

we include them in our model.

[65] We also include a dummy variable to flag the respondents who had zero earnings in the year of the distribution that were age 62 or older at the time of the distribution. We assume that retirement triggered the lump sum—hence, the zero earnings in that year.

[66] This *F* statistic is for the 5-year average specification using the broad definition of saving.

[67] One exception is the age variables. The magnitude of the estimates for age in the projected lifetime earnings specifications (the third column in table 5) is much higher than the magnitude of the age estimates in the other two earnings specifications. It is possible that this observed larger effect of age in column (3) is influenced by the construction of the lifetime earnings measure itself. Because the lifetime earnings measure is an average *over a lifetime*, its value does not depend on age. However, according to the lifecycle model of saving, age would affect earnings at the time of the distribution, as well as 5 years before the distribution. Hence, much of the explanatory power that the age variable brings to the model may be picked up in the earnings variables themselves in the year of the distribution and average 5-year specifications, resulting in a smaller observed effect of age on lump-sum choice when using earnings for the year of the distribution or 5-year average earnings.

[68] Appendix C, available from the authors, includes a table of *weighted* estimates. We include weighted results only to show that weighting the observations does not change our basic conclusions. Hence, we only present the results of one specification—using the broad definition of saving and the 5-year average earnings measure. It should be noted that the decision to use this definition of saving and this earnings measure was made somewhat arbitrarily; any of the other specifications also could have been used for this table.

[69] We find that when we take the earnings variable out of the model (regardless of which earnings measure is used) the estimate on the female dummy becomes small, negative, and statistically significant at the 5-percent level.

[70] IRAs and other tax-deferred vehicles impose a penalty for withdrawal before the recipient reaches age 59½.

[71] Purcell, "Lump-Sum Distributions and Retirement Income Security."

[72] For example, an individual may have had an unusually low earnings year (say, $25,000) at the time of the distribution, placing him or her in the $15–30,000 earnings category for that earnings measure. However, average projected lifetime annual earnings are higher, at $50,000, placing him in the greater-than-$50,000 category for that earnings measure.

[73] Leslie A. Muller, "Retirement Education and Pension Preservation: Does Retirement Education Teach Individuals to Save Pension Distributions?" *Social Security Bulletin* (forthcoming).

[74] Douglas B. Bernheim and Daniel M. Garrett, "The Determinants and Consequences of Financial Education in the Workplace: Evidence from a Survey of Households," NBER Working Paper 5667 (National Bureau of Economic Research, Cambridge, MA, July 1996).

Recent and planned improvements to Consumer Price Indexes

The Bureau of Labor Statistics is engaged in a continuing effort to improve the Consumer Price Index program. The focus of these efforts in recent years has centered on three areas: (1) employing more current spending patterns and samples of priced items; (2) reflecting the effects of consumer substitution in response to relative price change; and (3) accounting more completely both for changes in the quality of existing consumer goods and services and for new product introductions.

Updating expenditure patterns

The CPI has a two-tiered weighting structure; at the upper level the weights are based upon data from the Consumer Expenditure Survey. Historically, these expenditure weights were updated about every 10 years. The consumer expenditure weights in the CPI now are being updated at 2-year intervals; expenditure weights for the 1999–2000 period were introduced with the release of data for January 2002. The 1999–2000 expenditure weights replaced the weights for the 1993–95 period that had been introduced in January 1998. These new weights were 2 years old at the time of their introduction in January 2002. In contrast, the previous, 1993–95, expenditure weights were 3-½ years old when first used. Expenditure weights will next be updated to the 2001–02 period effective with release of data for January 2004. Although the expenditure weights are now being updated at 2-year intervals, the CPI's geographic area and housing unit samples are not being updated on a 2-year basis. However, the feasibility of a program for continuous rotation of these samples is being studied.

Updating items and outlets

The samples of items priced for the CPI and the retail stores and service establishments in which they are collected now are being updated on a 4-year cycle. Previously, these samples were updated every 5 years. In addition, because of improvements to the survey from which these samples are obtained, it now is possible to focus updating efforts on those areas of consumer spending in which goods and services tend to change rapidly.

Another major enhancement will occur in 2003, when BLS will begin reselecting many CPI item samples within the existing outlet samples, midway between the scheduled 4-year outlet sample rotations. That is, these item samples will be rotated every 2 years. This is a further step in making the CPI more representative of current consumer spending patterns as well as more reflective of new goods and services in the marketplace.

Accounting for consumer substitution

As noted, the CPI has a two-tiered weighting structure. Data from the survey of consumer expenditures do not provide enough detail to weight and combine prices at the individual item level. The weights for these items are presently derived from a survey of where consumers shop—called the Telephone Point-of-Purchase Survey. Within the two-tiered structure of calculating the CPI, consumer substitution can and does occur at both levels—that is, within and across item categories. To better approximate the effect of consumers' responses to changes in relative prices at the lower level of aggregation, BLS introduced a geometric mean estimator for averaging prices within most of the 211 index item categories.

The geometric mean is consistent with the assumption that consumers maintain constant expenditure shares at the elementary aggregate level. That is, it assumes that consumers substitute within item-area categories such that any increase in price of an item is offset by a corresponding decline in quantity purchased, and thus the item's expenditure share remains constant. The arithmetic mean, by contrast, is consistent with the assumption that consumers purchase fixed quantities of items within an item category and do not substitute in response to changes in relative prices.

The new formula now is being used in categories that, at the time of its introduction in February 1999, comprised approximately 61 percent of total consumer spending represented by the CPI-U. The remaining 15 index categories continue to be calculated as they previously had been, using an arithmetic mean. The geometric mean formula was chosen for those categories within which consumers are likely to change their spending in response to changes in relative prices. The arithmetic mean formula was chosen for those categories within which consumers are unlikely to respond to changes in relative prices.

New C-CPI-U

The Bureau will publish a Chained Consumer Price Index for All Urban Consumers, or C-CPI-U, beginning with release of July data in August 2002. This new index will supplement the Bureau's existing indexes: the CPI for All Urban Consumers (CPI-U) and the CPI for Urban Wage Earners and Clerical Workers (CPI-W).

The C-CPI-U will employ a Tornqvist formula and utilize expenditure data in adjacent time periods in order to reflect the effect of any substitution that consumers make across item categories in response to changes in relative prices. The new measure, a "superlative" index, is designed to be a closer approximation to a "cost-of-living" index than are the CPI-U and the CPI-W. The C-CPI-U uses expenditure data for both a base period and the current period in order to average price change across item categories. This distinguishes it from the existing CPI-U and CPI-W, which use only a single expenditure base period to compute the price change over time. As noted above, in 1999, BLS introduced a geometric mean estimator for averaging prices within most of the item categories in the consumer price indexes in order to approximate the effect of consumers' responses to changes in relative prices within these item categories. The geometric mean estimator will be used in the C-CPI-U in the same item categories in which it is now used in the CPI-U and CPI-W. (See *Monthly Labor Review*, October 1998, pp. 3–7.)

Expenditure data required for the calculation of the C-CPI-U are available only with a time lag. Thus, the C-CPI-U will be issued first in preliminary form using the latest available expenditure data at that time and will be subject to two subsequent revisions. Accordingly, when introduced in August, the C-CPI-U will present:

- final indexes for the 12 months of 2000
- interim values for the 12 months of 2001
- initial values for January-July of 2002.

In February 2003, with the release of data for January 2003, the C-CPI-U will publish:

- final indexes for 2001
- interim values for the 12 months of 2002
- initial values for January 2003.

In February 2004, the monthly expenditure data from calendar year 2002 becomes available and the C-CPI-U will publish:

- final indexes for the 12 months of 2002
- interim values for the12 months of 2003
- initial values for January 2004.

The revisions are expected to be small, but in principle each monthly index could differ from its previously published level.

BLS previously has calculated superlative indexes on an experimental basis, but they are not comparable to the C-CPI-U in all computational details. (See, for example, *Monthly Labor Review*, December 1993, pp. 25–33.) Based on BLS research, the C-CPI-U is estimated to increase at an average annual rate of 0.1 to 0.2 percentage point less than the CPI-U.

The C-CPI-U will be issued for national averages only and will not be seasonally adjusted. It will employ a December 1999=100 reference base. Data for periods prior to December 1999 will not be calculated. The component series that will be published are:

- All items
  - Food and beverages
    - Food
      - Food at home
      - Food away from home
      - Alcoholic beverages
  - Housing
    - Shelter
    - Fuels and utilities
    - Household furnishings and operations
  - Apparel
  - Transportation
    - Private transportation
    - Public transportation
  - Medical care
    - Medical care commodities
    - Medical care services
  - Recreation
  - Education and communications
    - Education
    - Communication
  - Other goods and services

  - Services
  - Commodities
    - Durables
    - Nondurables
  - All items less food and energy
  - Energy

The indexes will be published in the monthly CPI news release and *CPI Detailed Report*, and also will be available electronically on the consumer price indexes Web site:

http://www.bls.gov/cpi/

Quality changes and new goods

Funding was received, beginning in FY 1999, for special data collection to support the expansion of hedonic quality adjustment as part of a broad CPI improvement initiative. BLS researchers have employed a regression procedure, called hedonic modeling, that decomposes the price of an item into implicit prices for each important feature and component. This yields a mechanism for capturing the price change that may occur as new models replace old ones in the market place without counting the value of quality improvements as price increases. Although hedonic quality adjustments has been applied in the housing and apparel components of the CPI for more than a decade, the recent focus has been on consumer electronic and appliance goods. The products selected for hedonic modeling are at varying points in their development stream, some being fairly new and undergoing very rapid technological improvements, others having been on the market for some time. In 1998, the hedonic model was introduced for the first of these products—personal computers. In 1999, a model was introduced for adjusting television prices for changes in quality. In 2000, hedonic models subsequently were introduced for audio and video products, video cassette recorders (VCRs), Digital Versatile Discs (DVDs) players, refrigerator/freezers, microwave ovens, college textbooks, washing machines, and clothes dryers.

In addition to the enhanced outlet and item resampling procedures mentioned above, efforts are underway that are explicitly targeted at including new goods in the index in a systematic and timely way. In 1999, BLS researchers began augmenting or replacing CPI samples in selected item categories that are characterized by high rates of new product introduction. The primary focus thus far has been on the categories of prescription drugs and personal computers. It should be emphasized, however, that these improvements are not, by themselves, a complete solution to the problem of the treatment of new goods in the CPI.

BLS RESEARCHERS will continue efforts to improve the accuracy of the CPI. At the same time, however, solutions are not now available to all of the vexing measure-ment issues faced in producing this important index. Evidence of this is con-tained in a recent report by the Committee on National Statistics which outlined a number of recommendations for research and improvements in the CPI. See the Bureau-sponsored report, *At What Price? Conceptualizing and Measuring Cost-of-Living and Price Indexes*, Charles L. Schultze and Christopher Mackie, editors, Wasington, D.C., National Academy Press, 2000; on the Internet at:

http://www.nap.edu/books/0309074428/html

Further information on the new CPI-U and the other enhancements to the CPI can be obtained from the Bureau of Labor Statistics, Division of Consumer Prices and Price Indexes, Room 3130, 2 Massachusetts Avenue, N.E., Washington, D.C. 20212–0001; Telephone: (202) 691–6952; e-mail: cpi_info@bls.gov

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(202) 691–6325

Use a touch-tone telephone and follow the voice instructions for entering document codes and your fax telephone number. The fax-on-demand catalog, containing a list of available documents and codes, can be obtained by entering code 1000. You may request up to four documents with each call. Faxes are sent immediately following the request. If your fax line is busy, the system attempts to send the requested material four times before disconnecting.

A moveable workforce

How important is health insurance in today's economy? Important enough to accept a job with health insurance instead of one without, even if the latter is a better fit? Or to choose not to retire, if it means losing insurance? For many workers in today's economy the answer is "yes," according to Jonathan Gruber and Brigitte C. Madrian, in their report, "Health Insurance, Labor Supply, and Job Mobility: A Critical Review of the Literature (NBER Working Paper 8817). From their exhaustive assessment of the literature of the past 10 years, Gruber and Madrian have drawn two conclusions. First, the issue of adequate health insurance matters substantially when individuals are deciding whether they should change jobs or retire. Second, however, the implications of such decisions for the aggregate labor supply is inconclusive.

One element comes through clearly, however. Because the notion of job mobility is an important one in the U.S. economy, the ramifications of the lack of it are widespread. If workers are constrained in accepting jobs or leaving jobs, essentially they suffer from "job lock."

"Job lock" can occur in at least four situations—1) when a worker retains health insurance by: continuing to work past the customary retirement age; 2) continuing to work in a job because it provides health insurance for the family in a two-earner family; 3) not accepting a job due to the loss of welfare benefits, which provide Medicaid; and 4) remaining in a job in which the worker may not be fully productive. The authors find that, on the whole, the burden of health insurance is shifted to worker wages in the form of pay discrimination. It is an insidious shift, in that, "relatively high cost groups (such as older workers or women of child bearing age)" are on the receiving end of lower wages. It also can affect people changing jobs, as they lose credit toward deductibles or the out-of-pocket costs rise. Their current jobs may offer better choices, thus inducing the worker to stay and making change unattractive. Privately purchased health insurance is often prohibitive in cost or at worst, unavailable; thus providing yet another inhibition in job choice, if none is offered by the employer.

Health insurance and retirement. Statistically speaking, older people are more likely to avail themselves of health care coverage. As the authors point out, "there is a clear deterioration in health and an increase in medical utilization/spending after age 55." If the older worker is in poor health, retirement begins to look better and better. At the same time, the issue of poor health "raises the value of employer-provided health insurance, increasing the cost of labor force departure." Some workers will need to wait until they are eligible for Medicare, if their employer fails to provide retiree health insurance. Medicare eligibility does not begin until age 65, which itself can serve as a an effective deterrent to retirement if no other health insurance may be obtained. Almost without exception, the research indicates that retiree health insurance has a significant impact on the decision to retire.

Health insurance and labor supply of lower income single mothers. The studies that Gruber and Madrian surveyed regarding the labor market decisions of public assistance recipients reveal the potential loss of Medicaid to be a deciding factor in accepting work. This is a thornier issue to evaluate, however, as Medicaid benefits are " likely to have a strong independent effect on both labor supply and welfare participation." Another avenue to examine is the variety of other kinds of health insurance a worker might be eligible for if working. The results range from one finding that "a slight increase in the countrywide availability of employer-provided health insurance decreases the median Medicaid spell length by 3–11 months" to another study, which finds that "higher contribution rates for employer-provided health insurance lead to a decrease in the employment of single mothers."

Health insurance and married couples. Second-earner "job lock" may be faced by two-income couples, one of whom is self-employed and the other of whom is responsible for the family's health insurance, which she (for it is most often the wife) receives through her employer. The authors find, overall, that the literature "gives strong and consistent support to the notion that health insurance affects individual labor supply decisions. When there is a ready source of health insurance available not attached to one's own employment, individuals (particularly married women) are much less likely to be employed."

Health insurance and job turnover. This outcome is the most studied of all. It is also the most controversial in its findings. Researchers have used a variety of approaches; this variety, in turn, has led to an inconsonance in the overall findings concerning "job lock." Some researchers "find health insurance significantly impacts the job choice decisions made by workers; others find "no significant relationship between job choice and health insurance"; and still others find "evidence that varies by empirical specification or the sub-group analyzed, or effects that are not statistically significant."

Perhaps this is a good, even healthy, imbroglio. As the entire health care industry has evolved drastically over the last decade, so, too, has the research surrounding it. As Gruber and Madrian conclude, we have learned much about the effects of health insurance "on both labor supply and job mobility over the past ten years, but relatively little about the implications of these results." More finely focused work on the those implications must be done over the course of the next decade. It certainly couldn't hurt. ☐

American labor

State of the Union: A Century of American Labor. By Nelson Lichtenstein. Princeton, NJ, Princeton University Press, 2002. 352 pp. $29.95.

What happened to organized labor in the 20th century? At the start of the century, organizing labor was seen as a way to impose discipline on a chaotic situation in the United States. Faced with numerous labor disruptions, some employers were not opposed to an "organized" labor movement that could tame the chaos resulting from disaffected workers. When the Great Depression of the 1930s arrived, "organized" labor again appeared as a disciplinary force, this time as a force needed to bring about structural changes in American business. From that point on, during the next two decades, labor unions grew until reaching their membership peak in the 1950s. Since then, union membership as a percentage of total employment has declined to the point that, at the end of the century, scholars are asking whether unionized labor is irrelevant in American society.

State of the Union attempts to answer the question of what happened to organized labor and where it went wrong. It is a history, but a history written with a specific point of view. Lichtenstein sees the failure of organized labor as the failure of a movement to understand and capitalize on its importance to society. Beginning with the Depression, he outlines organized labor's successes in the 1930s as political leaders saw the value of unions. Unions offered the opportunity to protect and encourage higher wages, resulting in increased consumption, and a stronger economy. Where the Depression was seen as the failure of American capitalism, labor unions offered a countervailing force, both economic and political. At a time when workers were fervently searching for answers to their problems, some saw either communism or fascism as a solution. Industrial democracy re-enforced political democracy and so unions were seen, especially by the Roosevelt Administration, as important pillars of the American identity. This sharing of interests can be seen in the passage of the Wagner Act, a codification of the mutual interests between New Deal politicians and the unions.

While chronicling their successes, Lichtenstein writes extensively about the divisions in organized labor throughout this period. He re-emphasizes to the reader that even when they were successful, labor unions never spoke with one voice. Divisions ran deep, between skilled and semiskilled crafts, political radicals and moderates, whites and blacks, and men and women in the movement. Often unions disagreed on legislation, as the AFL did when it opposed the Wagner Act and the creation of the National Labor Relations Board. Despite these internal conflicts, organized labor grew because it met the larger needs of society, encouraging democracy and raising living standards for workers, both union and nonunion.

If the Wagner Act marks a high point of unions' political strength, the Taft-Hartley Act marks the beginning of unions' decline. Although union membership continued to grow after the law's enactment in 1947, the author feels that organized labor's withdrawal from the political arena in favor of firm-based negotiations led directly to its present weakness. Once unions turned inward, focusing on winning wage and benefit improvements for their members rather than working for the general improvement of all labor, he believes that unions began a slide from which they have never recovered.

From the author's perspective, there was nothing inevitable about this turn of events. Unions did not have to surrender their responsibilities to society to focus on gaining advantages for their members. Workers themselves did not give up fighting for more rights and power. As evidence, Lichtenstein cites the civil rights movement. Beginning in the 1960s, struggles for individual rights for blacks and women eclipsed the struggle for collective workers' rights. Unions could have fostered this movement, re-inventing the struggle for individual rights into a movement to improve the rights of all workers. Instead, while they recognized the relevant issues, they did not embrace them, thus erring at a critical juncture in U.S. history.

While supporting the resulting legislation that gained individual rights for workers, the author regrets the loss of collective rights, arguing that collective action offers workers opportunities not afforded by courts and government enforcement agencies. It is this premise, offered in the introduction and latter chapters, that buttresses many of the book's arguments. While not wishing to turn back the clock on individual rights, he advocates that unions re-awaken to their society-wide responsibilities through political action and, when necessary, labor-management confrontation rather than labor-management accord.

Nelson Lichtenstein writes a thought-provoking book on labor. He is highly critical of labor leaders and their short-sighted vision during the height of the labor movement. While he recognizes the political realities that limited organized labor's successes in Congress, he does not think that those realities are an excuse for the resulting political failures. Rather, he bemoans the lost opportunities that came with labor peace during the second half of the century. One may criticize him for underrating the role that the anti-Communist campaign of the late 1940s and early 1950s played in eroding the power of radical union leaders. Those more radical leaders may have avoided the errors committed by more conservative union leaders later in the century, but this is a small criticism of an otherwise fascinating account. *State of the Union* is a history written with a purpose—to encourage and energize a struggling labor movement, and to remind its leaders, and the reader, of the power of big ideas.

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Technological unemployment

Inventing Ourselves Out of Jobs? America's Debate over Technological Unemployment, 1929–1981. By Amy Sue Bix, Baltimore and London: The Johns Hopkins University Press, 2000. 376 pp.

The displacement of workers by advancing technology has been a concern of thinking people since the beginning of the industrial revolution during the second half of the 18th century. The intensity of this concern grew during the 19th century, and in time involved government agencies and commissions. The U.S. Bureau of Labor was created in the early 1880s at the behest, not least, of trade union leaders often representing craftsmen whose income and status were being diminished by low-skilled or unskilled men and women operating industrial machinery. The Bureau of Labor's first report in 1886 dealt with business fluctuations that had been experienced in the United States as well as abroad over the past 50 years. It found that mechanization was the essential reason for the unemployment characteristic of depression

In *Inventing Ourselves Out of Jobs*, Bix does not dwell on theoretical issues. Rather, she seeks to tell "the intellectual history of an idea, the notion that Americans must come to grips with the human consequences in introducing powerful machines into the workplace." She limits her discussion to the worker displacement effects of machines, and in this respect presents a thorough work.

As Bix shows, the Great Depression vastly magnified the public's concern with the displacement effects of technology, which spread over a broad range of manufacturing industries and their communications and transportation infrastructures. Quoting from or citing numerous publications and some of the workers who had been displaced, she stresses the shocking contrast between the promise of technology offered during much of the 1920s and the enormity of the unemployment witnessed during the 1930s—perceived widely as a result of that very technology.

Worker displacement, however, had already been occurring, if gradually, during the earlier decade. For example, the telephone industry had begun to install dialing and the electromechanical switching equipment that made it possible—thereby reducing the need for operators. The railroad industry eliminated 535,000 employees as operational efficiencies were improved. In agriculture, the tractor displaced large numbers of laborers, and supplied the technological basis for land consolidation, thus encouraging the eviction of tenant farmers, particularly in the South.

Representatives of business sharply took issue with the notion of technological unemployment, and President Hoover, while not unaware of it, did not think it had long-term significance.

Trade union spokesmen, finding it impolitic to oppose mechanization and the increasing productivity it made possible, proved unable to formulate an effective program to deal with worker displacement, except to propose a shorter workweek. They were reluctant, probably unwilling, to challenge the political and economic forces that gave rise to displacement. For her part, Bix does not address the competitive forces that compelled businesses to keep updating its productive equipment and processes of production, and the reorganization of managerial and workplace structures such updating often necessitated.

Yet, as Bix demonstrates, business leaders were quite active in promoting the great fairs of the 1930s, which propagated the blessings of the technological advances that their exhibits featured. The "Century of Progress" fair in Chicago (1933), and the World's Fair in New York City (1939) were designed to enhance the "faith" in progress that technology promised. Man must adapt to mechanization was the essential message of the Chicago exhibition, and this was indeed the implication of the influential idea of "cultural lag," coined by the sociologist William Ogburn—that is, the lag between invention and its acceptance by society at large—and, as far as the worker was concerned, overcome by training or retraining.

Apprehension about mechanization's negative employment effects pervaded much of American cultural life, Bix writes. She discusses relevant literary works, the transition from silent to sound film (which occasioned difficulties for a stratum of movie actors), and the struggle of musicians attempting to come to terms with recordings and other substitutes for "live" performers of music. Her treatment of these topics imparts considerable interest to her book.

Nevertheless, Bix avoids the theoretical and policy-oriented aspects that have revolved around the notion of technological unemployment. On the other hand, Bix cites the concerns of American presidents from F.D. Roosevelt to Bill Clinton. But the theory of unemployment implicit in the New Deal and its addressing of the problem was that it stemmed from inadequate purchasing power and other deflationary pressures. Remedying these weaknesses would restore employment. Measures such as unemployment compensation, social security provisions, farm subsidies, public employment programs, and the devaluation of the dollar against gold—whatever their ultimate success—were designed to bolster purchasing power. Articulated subsequently by J.M. Keynes and his followers, this has been the theory of aggregate demand stimulation if the unemployment rate would exceed a certain level ever since.

This theory, or conception, of the causes of unemployment, however, could not explain, let alone come to grips with, the many "structural" factors that jeopardized employment. During the 1960s, the fear that automation would give rise to massive job loss, and which drew government agencies and private researchers into lengthy investigations, gave currency to the concept of structural unemployment. Again, Bix does not mention this aspect of unemployment, which, however, subsumes the displacement of workers by technological change. Sporadic as well as continual attempts to mitigate structural unemployment have been made by government—for example, the subsidizing of redevelopment of industrially declining areas; training and retraining programs; and varieties of tax credits. (The *Displaced Worker Survey* instituted by the BLS in the 1980s also appeared to be a way to probe the extent of structural unemployment.)

Notwithstanding all the concern about unemployment and its causes, one of the U.S. Government's overarching policies has been the promotion of productivity and the technological advances it spelled. This policy, the evidence for which cannot be detailed here, has certainly sustained the dynamics of American capitalism, and has also been believed to have favorable distribution effects as between capital and labor. In some ways illustrative of the dominance of the policy was the investment tax credit, legislated under the Kennedy administration in 1962, designed to spur "modernization" of plant and equipment. Additionally, depreciation write-offs were allowed to be shortened over time—this at the very time when apprehension over job loss because of automation was at its height.

Bix is invariably sympathetic to the victims of technological displacement, but she keeps her distance from analyzing the economic interests that have underlain the causes of such displacement, as well as from the reasons why the human losses such displacement has caused were not adequately, if at all, compensated.

—Horst Brand

Economist,
formerly with the
Bureau of Labor Statistics

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Errata

In the article, "The labor force experience of women from 'Generation X'" (*Monthly Labor Review,* March 2002, pp. 3-15), headings in table 2 (page 5) and table 5 (page 9) are incorrect. The correct headings are reproduced below (corrections in italics).

Table 2 **Labor force participation of women and men aged 25 to 34 by selected demographic characteristics, March 1975 and 2000**

(Numbers in thousands)

Characteristic	Women				Men			
	Number		Participation rate		Number		Participation rate	
	1975	***2000***	***1975***	***2000***	***1975***	***2000***	***1975***	***2000***

Table 5 **Women aged 25 to 34 with work experience in 1975 and 1999 by race, Hispanic origin, and marital status, March 2000 status, March 2000 CPS**

Race, Hispanic origin, and marital status	1975					1999				
	Total with work experience (in thousands)	Percent with work experience				Total with work experience (in thousands)	Percent with work experience			
		Usually worked full time			***Usually worked part time***[1]		Usually worked full time			***Usually worked part time***[1]
		As percent of population	Total[1]	50–52 weeks			As percent of population	Total[1]	50–52 weeks	

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Notes on Current Labor Statistics

This section of the *Review* presents the principal statistical series collected and calculated by the Bureau of Labor Statistics: series on labor force; employment; unemployment; labor compensation; consumer, producer, and international prices; productivity; international comparisons; and injury and illness statistics. In the notes that follow, the data in each group of tables are briefly described; key definitions are given; notes on the data are set forth; and sources of additional information are cited.

General notes

The following notes apply to several tables in this section:

Seasonal adjustment. Certain monthly and quarterly data are adjusted to eliminate the effect on the data of such factors as climatic conditions, industry production schedules, opening and closing of schools, holiday buying periods, and vacation practices, which might prevent short-term evaluation of the statistical series. Tables containing data that have been adjusted are identified as "seasonally adjusted." (All other data are not seasonally adjusted.) Seasonal effects are estimated on the basis of past experience. When new seasonal factors are computed each year, revisions may affect seasonally adjusted data for several preceding years.

Seasonally adjusted data appear in tables 1–14, 16–17, 43, and 47. Seasonally adjusted labor force data in tables 1 and 4–9 were revised in the February 2002 issue of the *Review*. Seasonally adjusted establishment survey data shown in tables 1, 12–14 and 16–17 were revised in the July 2001 *Review* and reflect the experience through March 2001. A brief explanation of the seasonal adjustment methodology appears in "Notes on the data."

Revisions in the productivity data in table 49 are usually introduced in the September issue. Seasonally adjusted indexes and percent changes from month-to-month and quarter-to-quarter are published for numerous Consumer and Producer Price Index series. However, seasonally adjusted indexes are not published for the U.S. average All-Items CPI. Only seasonally adjusted percent changes are available for this series.

Adjustments for price changes. Some data—such as the "real" earnings shown in table 14—are adjusted to eliminate the effect of changes in price. These adjustments are made by dividing current-dollar values by the Consumer Price Index or the appropriate component of the index, then multiplying by 100. For example, given a current hourly wage rate of $3 and a current price index number of 150, where 1982 = 100, the hourly rate expressed in 1982 dollars is $2 ($3/150 x 100 = $2). The $2 (or any other resulting values) are described as "real," "constant," or "1982" dollars.

Sources of information

Data that supplement the tables in this section are published by the Bureau in a variety of sources. Definitions of each series and notes on the data are contained in later sections of these Notes describing each set of data. For detailed descriptions of each data series, see *BLS Handbook of Methods*, Bulletin 2490. Users also may wish to consult *Major Programs of the Bureau of Labor Statistics*, Report 919. News releases provide the latest statistical information published by the Bureau; the major recurring releases are published according to the schedule appearing on the back cover of this issue.

More information about labor force, employment, and unemployment data and the household and establishment surveys underlying the data are available in the Bureau's monthly publication, *Employment and Earnings*. Historical unadjusted and seasonally adjusted data from the household survey are available on the Internet:

http://www.bls.gov/cps/

Historically comparable unadjusted and seasonally adjusted data from the establishment survey also are available on the Internet:

http://www.bls.gov/ces/

Additional information on labor force data for areas below the national level are provided in the BLS annual report, *Geographic Profile of Employment and Unemployment*.

For a comprehensive discussion of the Employment Cost Index, see *Employment Cost Indexes and Levels, 1975–95*, BLS Bulletin 2466. The most recent data from the Employee Benefits Survey appear in the following Bureau of Labor Statistics bulletins: *Employee Benefits in Medium and Large Firms; Employee Benefits in Small Private Establishments*; and *Employee Benefits in State and Local Governments*.

More detailed data on consumer and producer prices are published in the monthly periodicals, *The CPI Detailed Report* and *Producer Price Indexes*. For an overview of the 1998 revision of the CPI, see the December 1996 issue of the *Monthly Labor Review*. Additional data on international prices appear in monthly news releases.

Listings of industries for which productivity indexes are available may be found on the Internet:

http://www.bls.gov/lpc/

For additional information on international comparisons data, see *International Comparisons of Unemployment*, BLS Bulletin 1979.

Detailed data on the occupational injury and illness series are published in *Occupational Injuries and Illnesses in the United States, by Industry*, a BLS annual bulletin.

Finally, the *Monthly Labor Review* carries analytical articles on annual and longer term developments in labor force, employment, and unemployment; employee compensation and collective bargaining; prices; productivity; international comparisons; and injury and illness data.

Symbols

n.e.c. = not elsewhere classified.
n.e.s. = not elsewhere specified.
p = preliminary. To increase the timeliness of some series, preliminary figures are issued based on representative but incomplete returns.
r = revised. Generally, this revision reflects the availability of later data, but also may reflect other adjustments.

Comparative Indicators

(Tables 1–3)

Comparative indicators tables provide an overview and comparison of major BLS statistical series. Consequently, although many of the included series are available monthly, all measures in these comparative tables are presented quarterly and annually.

Labor market indicators include employment measures from two major surveys and information on rates of change in compensation provided by the Employment Cost Index (ECI) program. The labor force participation rate, the employment-to-population ratio, and unemployment rates for major demographic groups based on the Current Population ("household") Survey are presented, while measures of employment and average weekly hours by major industry sector are given using nonfarm payroll data. The Employment Cost Index (compensation), by major sector and by bargaining status, is chosen from a variety of BLS compensation and wage measures because it provides a comprehensive measure of employer costs for hiring labor, not just outlays for wages, and it is not affected by employment shifts among occupations and industries.

Data on **changes in compensation, prices, and productivity** are presented in table 2. Measures of rates of change of compensation and wages from the Employment Cost Index program are provided for all civilian nonfarm workers (excluding Federal and household workers) and for all private nonfarm workers. Measures of changes in consumer prices for all urban consumers; producer prices by stage of processing; overall prices by stage of processing; and overall export and import price indexes are given. Measures of productivity (output per hour of all persons) are provided for major sectors.

Alternative measures of wage and compensation rates of change, which reflect the overall trend in labor costs, are summarized in table 3. Differences in concepts and scope, related to the specific purposes of the series, contribute to the variation in changes among the individual measures.

Notes on the data

Definitions of each series and notes on the data are contained in later sections of these notes describing each set of data.

Employment and Unemployment Data

(Tables 1; 4–24)

Household survey data

Description of the series

EMPLOYMENT DATA in this section are obtained from the Current Population Survey, a program of personal interviews conducted monthly by the Bureau of the Census for the Bureau of Labor Statistics. The sample consists of about 60,000 households selected to represent the U.S. population 16 years of age and older. Households are interviewed on a rotating basis, so that three-fourths of the sample is the same for any 2 consecutive months.

Definitions

Employed persons include (1) all those who worked for pay any time during the week which includes the 12th day of the month or who worked unpaid for 15 hours or more in a family-operated enterprise and (2) those who were temporarily absent from their regular jobs because of illness, vacation, industrial dispute, or similar reasons. A person working at more than one job is counted only in the job at which he or she worked the greatest number of hours.

Unemployed persons are those who did not work during the survey week, but were available for work except for temporary illness and had looked for jobs within the preceding 4 weeks. Persons who did not look for work because they were on layoff are also counted among the unemployed. **The unemployment rate** represents the number unemployed as a percent of the civilian labor force.

The **civilian labor force** consists of all employed or unemployed persons in the civilian noninstitutional population. Persons **not in the labor force** are those not classified as employed or unemployed. This group includes discouraged workers, defined as persons who want and are available for a job and who have looked for work sometime in the past 12 months (or since the end of their last job if they held one within the past 12 months), but are not currently looking, because they believe there are no jobs available or there are none for which they would qualify. The **civilian noninstitutional population** comprises all persons 16 years of age and older who are not inmates of penal or mental institutions, sanitariums, or homes for the aged, infirm, or needy. The **civilian labor force participation** rate is the proportion of the civilian noninstitutional population that is in the labor force. The **employment-population ratio** is employment as a percent of the civilian noninstitutional population.

Notes on the data

From time to time, and especially after a decennial census, adjustments are made in the Current Population Survey figures to correct for estimating errors during the intercensal years. These adjustments affect the comparability of historical data. A description of these adjustments and their effect on the various data series appears in the Explanatory Notes of *Employment and Earnings*.

Labor force data in tables 1 and 4–9 are seasonally adjusted. Since January 1980, national labor force data have been seasonally adjusted with a procedure called X-11 ARIMA which was developed at Statistics Canada as an extension of the standard X-11 method previously used by BLS. A detailed description of the procedure appears in the X-11 *ARIMA Seasonal Adjustment Method*, by Estela Bee Dagum (Statistics Canada, Catalogue No. 12-564E, January 1983).

At the beginning of each calendar year, historical seasonally adjusted data usually are revised, and projected seasonal adjustment factors are calculated for use during the January–June period. The historical seasonally adjusted data usually are revised for only the most recent 5 years. In July, new seasonal adjustment factors, which incorporate the experience through June, are produced for the July–December period, but no revisions are made in the historical data.

FOR ADDITIONAL INFORMATION on national household survey data, contact the Division of Labor Force Statistics: (202) 691–6378.

Establishment survey data

Description of the series

EMPLOYMENT, HOURS, AND EARNINGS DATA in this section are compiled from payroll records reported monthly on a voluntary basis to the Bureau of Labor Statistics and its cooperating State agencies by about 300,000 establishments representing all industries except agriculture. Industries are classified in accordance with the 1987 *Standard Industrial Classification (SIC) Manual*. In most industries, the sampling probabilities are based on the size of the establishment; most large establishments are therefore in the sample. (An establishment is not necessarily a firm; it may be a branch plant, for example, or warehouse.) Self-employed persons and others not on a regular civilian payroll are outside the scope of the survey because they are excluded from establishment records. This largely accounts for the difference in employment figures between the household and establishment surveys.

Definitions

An **establishment** is an economic unit which produces goods or services (such as a factory or store) at a single location and is engaged in one type of economic activity.

Employed persons are all persons who received pay (including holiday and sick pay) for any part of the payroll period including the 12th day of the month. Persons holding more than one job (about 5 percent of all persons in the labor force) are counted in each establishment which reports them.

Production workers in manufacturing include working supervisors and nonsupervisory workers closely associated with production operations. Those workers mentioned in tables 11–16 include production workers in manufacturing and mining; construction workers in construction; and nonsupervisory workers in the following industries: transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services. These groups account for about four-fifths of the total employment on private nonagricultural payrolls.

Earnings are the payments production or nonsupervisory workers receive during the survey period, including premium pay for overtime or late-shift work but excluding irregular bonuses and other special payments. **Real earnings** are earnings adjusted to reflect the effects of changes in consumer prices. The deflator for this series is derived from the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W).

Hours represent the average weekly hours of production or nonsupervisory workers for which pay was received, and are different from standard or scheduled hours. **Overtime hours** represent the portion of average weekly hours which was in excess of regular hours and for which overtime premiums were paid.

The **Diffusion Index** represents the percent of industries in which employment was rising over the indicated period, plus one-half of the industries with unchanged employment; 50 percent indicates an equal balance between industries with increasing and decreasing employment. In line with Bureau practice, data for the 1-, 3-, and 6-month spans are seasonally adjusted, while those for the 12-month span are unadjusted. Data are centered within the span. Table 17 provides an index on private nonfarm employment based on 356 industries, and a manufacturing index based on 139 industries. These indexes are useful for measuring the dispersion of economic gains or losses and are also economic indicators.

Notes on the data

Establishment survey data are annually adjusted to comprehensive counts of employment (called "benchmarks"). The latest adjustment, which incorporated March 2000 benchmarks, was made with the release of May 2001 data, published in the July 2001 issue of the *Review*. Coincident with the benchmark adjustment, historical seasonally adjusted data were revised to reflect updated seasonal factors. Unadjusted data from April 2000 forward and seasonally adjusted data from January 1997 forward are subject to revision in future benchmarks.

In addition to the routine benchmark revisions and updated seasonal factors introduced with the release of the May 2001 data, the first estimates for the mining, construction, and manufacturing industries were published from a new probability-based sample design. The first estimates from the new design, for the wholesale trade industry, were published with the March 1999 benchmark revisions in June 2000. Estimates from the redesigned survey for the remaining industry divisions will be phased in with subsequent years' benchmark releases in 2002 and 2003. For additional information, see the the June 2001 issue of *Employment and Earnings*.

Revisions in State data (table 11) occurred with the publication of January 2002 data.

Beginning in June 1996, the BLS uses the X-12-ARIMA methodology to seasonally adjust establishment survey data. This procedure, developed by the Bureau of the Census, controls for the effect of varying survey intervals (also known as the 4- versus 5-week effect), thereby providing improved measurement of over-the-month changes and underlying economic trends. Revisions of data, usually for the most recent 5-year period, are made once a year coincident with the benchmark revisions.

In the establishment survey, estimates for the most recent 2 months are based on incomplete returns and are published as preliminary in the tables (12–17 in the *Review*). When all returns have been received, the estimates are revised and published as "final" (prior to any benchmark revisions) in the third month of their appearance. Thus, December data are published as preliminary in January and February and as final in March. For the same reasons, quarterly establishment data (table 1) are preliminary for the first 2 months of publication and final in the third month. Thus, fourth-quarter data are published as preliminary in January and February and as final in March.

FOR ADDITIONAL INFORMATION on establishment survey data, contact the Division of Current Employment Statistics: (202) 691-6555.

Unemployment data by State

Description of the series

Data presented in this section are obtained from the Local Area Unemployment Statistics (LAUS) program, which is conducted in cooperation with State employment security agencies.

Monthly estimates of the labor force, employment, and unemployment for States and sub-State areas are a key indicator of local economic conditions, and form the basis for determining the eligibility of an area for benefits under Federal economic assistance programs such as the Job Training Partnership Act. Seasonally adjusted unemployment rates are presented in table 10. Insofar as possible, the concepts and definitions underlying these data are those used in the national estimates obtained from the CPS.

Notes on the data

Data refer to State of residence. Monthly data for all States and the District of Columbia are derived using standardized procedures established by BLS. Once a year, estimates are revised to new population controls, usually with publication of January estimates, and benchmarked to annual average CPS levels.

FOR ADDITIONAL INFORMATION on data in this series, call (202) 691–6392 (table 10) or (202) 691–6559 (table 11).

Covered employment and wage data (ES–202)

Description of the series

EMPLOYMENT, WAGE, AND ESTABLISHMENT DATA in this section are derived from the quarterly tax reports submitted to State employment security agencies by private and State and local government employers subject to State unemployment insurance (UI) laws and from Federal, agencies subject to the Unemployment Compensation for Federal Employees (UCFE) program. Each quarter, State agencies edit and process the data and send the information to the Bureau of Labor Statistics.

The Covered Employment and Wages data, also referred as ES-202 data, are the most complete enumeration of employment and wage information by industry at the national, State, metropolitan area, and county levels. They have broad economic significance in evaluating labor market trends and major industry developments.

Definitions

In general, ES-202 monthly employment data represent the number of **covered workers** who worked during, or received pay for, the pay period that included the 12th day of the month. **Covered private industry employment** includes most corporate officials, executives, supervisory personnel, professionals, clerical workers, wage earners, piece workers, and part-time workers. It excludes proprietors, the unincorporated self-employed, unpaid family members, and certain farm and domestic workers. Certain types of nonprofit employers, such as religious organizations, are given a choice of coverage or exclusion in a number of States. Workers in these organizations are, therefore, reported to a limited degree.

Persons on paid sick leave, paid holiday, paid vacation, and the like, are included. Persons on the payroll of more than one firm during the period are counted by each UI-subject employer if they meet the employment definition noted earlier. The employment count excludes workers who earned no wages during the entire applicable pay period because of work stoppages, temporary layoffs, illness, or unpaid vacations.

Federal employment data are based on reports of monthly employment and quarterly wages submitted each quarter to State agencies for all Federal installations with employees covered by the Unemployment Compensation for Federal Employees (UCFE) program, except for certain national security agencies, which are omitted for security reasons. Employment for all Federal agencies for any given month is based on the number of persons who worked during or received pay for the pay period that included the 12th of the month.

An **establishment** is an economic unit, such as a farm, mine, factory, or store, that produces goods or provides services. It is typically at a single physical location and engaged in one, or predominantly one, type of economic activity for which a single industrial classification may be applied. Occasionally, a single physical location encompasses two or more distinct and significant activities. Each activity should be reported as a separate establishment if separate records are kept and the various activities are classified under different four-digit SIC codes.

Most employers have only one establishment; thus, the establishment is the predominant reporting unit or statistical entity for reporting employment and wages data. Most employers, including State and local governments who operate more than one establishment in a State, file a Multiple Worksite Report each quarter, in addition to their quarterly UI report. The Multiple Worksite Report is used to collect separate employment and wage data for each of the employer's establishments, which are not detailed on the UI report. Some very small multi-establishment employers do not file a Multiple Worksite Report. When the total employment in an employer's secondary establishments (all establishments other than the largest) is 10 or fewer, the employer generally will file a consolidated report for all establishments. Also, some employers either cannot or will not report at the establishment level and thus aggregate establishments into one consolidated unit, or possibly several units, though not at the establishment level.

For the Federal Government, the reporting unit is the **installation**: a single location at which a department, agency, or other government body has civilian employees. Federal agencies follow slightly different criteria than do private employers when breaking down their reports by installation. They are permitted to combine as a single statewide unit: 1) all installations with 10 or fewer workers, and 2) all installations that have a combined total in the State of fewer than 50 workers. Also, when there are fewer than 25 workers in all secondary installations in a State, the secondary installations may be combined and reported with the major installation. Last, if a Federal agency has fewer than five employees in a State, the agency headquarters office (regional office, district office) serving each State may consolidate the employment and wages data for that State with the data reported to the State in which the headquarters is located. As a result of these reporting rules, the number of reporting units is always larger than the number of employers (or government agencies) but smaller than the number of actual establishments (or installations).

Data reported for the first quarter are tabulated into **size** categories ranging from worksites of very small size to those with 1,000 employees or more. The size category is determined by the establishment's March employment level. It is important to note that each establishment of a multi-establishment firm is tabulated separately into the appropriate size category. The total employment level of the reporting multi-establishment firm is not used in the size tabulation.

Covered employers in most States report total **wages** paid during the calendar quarter, regardless of when the services were performed. A few State laws, however, specify that wages be reported for, or based on the period during which services are performed rather than the period during which compensation is paid. Under most State laws or regulations, wages include bonuses, stock options, the cash value of meals and lodging, tips and other gratuities, and, in some States, employer contributions to certain deferred compensation plans such as 401(k) plans.

Covered employer contributions for old-age, survivors, and disability insurance (OASDI), health insurance, unemployment insurance, workers' compensation, and private pension and welfare funds are not reported as wages. Employee contributions for the same purposes, however, as well as money withheld for income taxes, union dues, and so forth, are reported even though they are deducted from the worker's gross pay.

Wages of covered Federal workers represent the gross amount of all payrolls for all pay periods ending within the quarter. This includes cash allowances, the cash equivalent of any type of remuneration, severance pay, withholding taxes, and retirement deductions. Federal employee remuneration generally covers the same types of services as for workers in private industry.

Average annual wages per employee for any given industry are computed by dividing total annual wages by annual average employment. A further division by 52 yields average weekly wages per employee. Annual pay data only approximate annual earnings because an individual may not be employed by the same employer all year or may work for more than one employer at a time.

Average weekly or annual pay is affected by the ratio of full-time to part-time workers as well as the number of individuals in high-paying and low-paying occupations. When average pay levels between States and industries are compared, these factors should be taken into consideration. For example, industries characterized by high proportions of part-time workers will show average wage levels appreciably less than the weekly pay levels of regular full-time employees in these industries. The opposite effect characterizes industries with low proportions of part-time workers, or industries that typically schedule heavy weekend and overtime work. Average wage data also may be influenced by work stoppages, labor turnover rates, retroactive payments, seasonal factors, bonus payments, and so on.

Notes on the data

To insure the highest possible quality of data, State employment security agencies verify with employers and update, if necessary, the industry, location, and ownership classification of all establishments on a 3-year cycle. Changes in establishment classification codes resulting from the verification process are introduced with the data reported for the first quarter of the year. Changes resulting from improved employer reporting also are introduced in the first quarter. For these reasons, some data, especially at more detailed geographic levels, may not be strictly comparable with earlier years.

The 1999 county data used to calculate the 1999–2000 changes were adjusted for changes in industry and county classification to make them comparable to data for 2000. As a result, the adjusted 1999 data differ to some extent from the data available on the Internet at:

http://www.bls.gov/cew/home.htm.

County definitions are assigned according to Federal Information Processing Standards Publications as issued by the National Institute of Standards and Technology. Areas shown as counties include those designated as independent cities in some jurisdictions and, in Alaska, those areas designated by the Census Bureau where counties have not been created. County data also are presented for the New England States for comparative purposes, even though townships are the more common designation used in New England

(and New Jersey).

For additional information on the covered employment and wage data, contact the Division of Administrative Statistics and Labor Turnover at (202) 691–6567.

Compensation and Wage Data

(Tables 1–3; 25–31)

COMPENSATION AND WAGE DATA are gathered by the Bureau from business establishments, State and local governments, labor unions, collective bargaining agreements on file with the Bureau, and secondary sources.

Employment Cost Index

Description of the series

The **Employment Cost Index** (ECI) is a quarterly measure of the rate of change in compensation per hour worked and includes wages, salaries, and employer costs of employee benefits. It uses a fixed market basket of labor—similar in concept to the Consumer Price Index's fixed market basket of goods and services—to measure change over time in employer costs of employing labor.

Statistical series on total compensation costs, on wages and salaries, and on benefit costs are available for private nonfarm workers excluding proprietors, the self-employed, and household workers. The total compensation costs and wages and salaries series are also available for State and local government workers and for the civilian nonfarm economy, which consists of private industry and State and local government workers combined. Federal workers are excluded.

The Employment Cost Index probability sample consists of about 4,400 private nonfarm establishments providing about 23,000 occupational observations and 1,000 State and local government establishments providing 6,000 occupational observations selected to represent total employment in each sector. On average, each reporting unit provides wage and compensation information on five well-specified occupations. Data are collected each quarter for the pay period including the 12th day of March, June, September, and December.

Beginning with June 1986 data, fixed employment weights from the 1980 Census of Population are used each quarter to calculate the civilian and private indexes and the index for State and local governments. (Prior to June 1986, the employment weights are from the 1970 Census of Population.) These fixed weights, also used to derive all of the industry and occupation series indexes, ensure that changes in these indexes reflect only changes in compensation, not employment shifts among industries or occupations with different levels of wages and compensation. For the bargaining status, region, and metropolitan/non-metropolitan area series, however, employment data by industry and occupation are not available from the census. Instead, the 1980 employment weights are reallocated within these series each quarter based on the current sample. Therefore, these indexes are not strictly comparable to those for the aggregate, industry, and occupation series.

Definitions

Total compensation costs include wages, salaries, and the employer's costs for employee benefits.

Wages and salaries consist of earnings before payroll deductions, including production bonuses, incentive earnings, commissions, and cost-of-living adjustments.

Benefits include the cost to employers for paid leave, supplemental pay (including nonproduction bonuses), insurance, retirement and savings plans, and legally required benefits (such as Social Security, workers' compensation, and unemployment insurance).

Excluded from wages and salaries and employee benefits are such items as payment-in-kind, free room and board, and tips.

Notes on the data

The Employment Cost Index for changes in wages and salaries in the private nonfarm economy was published beginning in 1975. Changes in total compensation cost—wages and salaries and benefits combined—were published beginning in 1980. The series of changes in wages and salaries and for total compensation in the State and local government sector and in the civilian nonfarm economy (excluding Federal employees) were published beginning in 1981. Historical indexes (June 1981=100) are available on the Internet:

http://www.bls.gov/ect/

FOR ADDITIONAL INFORMATION on the Employment Cost Index, contact the Office of Compensation Levels and Trends: (202) 691–6199.

Employee Benefits Survey

Description of the series

Employee benefits data are obtained from the Employee Benefits Survey, an annual survey of the incidence and provisions of selected benefits provided by employers. The survey collects data from a sample of approximately 9,000 private sector and State and local government establishments. The data are presented as a percentage of employees who participate in a certain benefit, or as an average benefit provision (for example, the average number of paid holidays provided to employees per year). Selected data from the survey are presented in table 25 for medium and large private establishments and in table 26 for small private establishments and State and local government.

The survey covers paid leave benefits such as holidays and vacations, and personal, funeral, jury duty, military, family, and sick leave; short-term disability, long-term disability, and life insurance; medical, dental, and vision care plans; defined benefit and defined contribution plans; flexible benefits plans; reimbursement accounts; and unpaid family leave.

Also, data are tabulated on the incidence of several other benefits, such as severance pay, child-care assistance, wellness programs, and employee assistance programs.

Definitions

Employer-provided benefits are benefits that are financed either wholly or partly by the employer. They may be sponsored by a union or other third party, as long as there is some employer financing. However, some benefits that are fully paid for by the employee also are included. For example, long-term care insurance and postretirement life insurance paid entirely by the employee are included because the guarantee of insurability and availability at group premium rates are considered a benefit.

Participants are workers who are covered by a benefit, whether or not they use that benefit. If the benefit plan is financed wholly by employers and requires employees to complete a minimum length of service for eligibility, the workers are considered participants whether or not they have met the requirement. If workers are required to contribute towards the cost of a plan, they are considered participants only if they elect the plan and agree to make the required contributions.

Defined benefit pension plans use predetermined formulas to calculate a retirement benefit (if any), and obligate the employer to provide those benefits. Benefits are generally based on salary, years of service, or both.

Defined contribution plans generally specify the level of employer and employee contributions to a plan, but not the formula for determining eventual benefits. Instead, individual accounts are set up for participants, and benefits are based on amounts credited to these accounts.

Tax-deferred savings plans are a type of defined contribution plan that allow participants to contribute a portion of their salary to an employer-sponsored plan and defer income taxes until withdrawal.

Flexible benefit plans allow employees to choose among several benefits, such as life insurance, medical care, and vacation days, and among several levels of coverage within a given benefit.

Notes on the data

Surveys of employees in medium and large establishments conducted over the 1979–86 period included establishments that employed at least 50, 100, or 250 workers, depending on the industry (most service industries were excluded). The survey conducted in 1987 covered only State and local governments with 50 or more employees. The surveys conducted in 1988 and 1989 included medium and large establishments with 100 workers or more in private industries. All surveys conducted over the 1979–89 period excluded establishments in Alaska and Hawaii, as well as part-time employees.

Beginning in 1990, surveys of State and local governments and small private establishments were conducted in even-numbered years, and surveys of medium and large establishments were conducted in odd-numbered years. The small establishment survey includes all private nonfarm establishments with fewer than 100 workers, while the State and local government survey includes all governments, regardless of the number of workers. All three surveys include full- and part-time workers, and workers in all 50 States and the District of Columbia.

FOR ADDITIONAL INFORMATION on the Employee Benefits Survey, contact the Office of Compensation Levels and Trends on the Internet: **http://www.bls.gov/ebs/**

Work stoppages

Description of the series

Data on work stoppages measure the number and duration of major strikes or lockouts (involving 1,000 workers or more) occurring during the month (or year), the number of workers involved, and the amount of work time lost because of stoppage. These data are presented in table 27.

Data are largely from a variety of published sources and cover only establishments directly involved in a stoppage. They do not measure the indirect or secondary effect of stoppages on other establishments whose employees are idle owing to material shortages or lack of service.

Definitions

Number of stoppages: The number of strikes and lockouts involving 1,000 workers or more and lasting a full shift or longer.

Workers involved: The number of workers directly involved in the stoppage.

Number of days idle: The aggregate number of workdays lost by workers involved in the stoppages.

Days of idleness as a percent of estimated working time: Aggregate workdays lost as a percent of the aggregate number of standard workdays in the period multiplied by total employment in the period.

Notes on the data

This series is not comparable with the one terminated in 1981 that covered strikes involving six workers or more.

FOR ADDITIONAL INFORMATION on work stoppages data, contact the Office of Compensation and Working Conditions: (202) 691–6282, or the Internet:

http://www.bls.gov/cba/

Price Data

(Tables 2; 32–42)

PRICE DATA are gathered by the Bureau of Labor Statistics from retail and primary markets in the United States. Price indexes are given in relation to a base period—1982 = 100 for many Producer Price Indexes, 1982–84 = 100 for many Consumer Price Indexes (unless otherwise noted), and 1990 = 100 for International Price Indexes.

Consumer Price Indexes

Description of the series

The **Consumer Price Index** (CPI) is a measure of the average change in the prices paid by urban consumers for a fixed market basket of goods and services. The CPI is calculated monthly for two population groups, one consisting only of urban households whose primary source of income is derived from the employment of wage earners and clerical workers, and the other consisting of all urban households. The wage earner index (CPI-W) is a continuation of the historic index that was introduced well over a half-century ago for use in wage negotiations. As new uses were developed for the CPI in recent years, the need for a broader and more representative index became apparent. The all-urban consumer index (CPI-U), introduced in 1978, is representative of the 1993–95 buying habits of about 87 percent of the noninstitutional population of the United States at that time, compared with 32 percent represented in the CPI-W. In addition to wage earners and clerical workers, the CPI-U covers professional, managerial, and technical workers, the self-employed, short-term workers, the unemployed, retirees, and others not in the labor force.

The CPI is based on prices of food, clothing, shelter, fuel, drugs, transportation fares, doctors' and dentists' fees, and other goods and services that people buy for day-to-day living. The quantity and quality of these items are kept essentially unchanged between major revisions so that only price changes will be measured. All taxes directly associated with the purchase and use of items are included in the index.

Data collected from more than 23,000 retail establishments and 5,800 housing units in 87 urban areas across the country are used to develop the "U.S. city average." Separate estimates for 14 major urban centers are presented in table 33. The areas listed are as indicated in footnote 1 to the table. The area indexes measure only the average change in prices for each area since the base period, and do not indicate differences in the level of prices among cities.

Notes on the data

In January 1983, the Bureau changed the way in which homeownership costs are meaured for the CPI-U. A rental equivalence method replaced the asset-price approach to homeownership costs for that series. In January 1985, the same change was made in the CPI-W. The central purpose of the change was to separate shelter costs from the investment component of home-ownership so that the index would reflect only the cost of shelter services provided by owner-occupied homes. An updated CPI-U and CPI-W were introduced with release of the January 1987 and January 1998 data.

FOR ADDITIONAL INFORMATION on consumer prices, contact the Division of Consumer Prices and Price Indexes: (202) 691–7000.

Producer Price Indexes

Description of the series

Producer Price Indexes (PPI) measure average changes in prices received by domestic producers of commodities in all stages of processing. The sample used for calculating these indexes currently contains about 3,200 commodities and about 80,000 quotations per month, selected to represent the movement of prices of all commodities produced in the manufacturing; agriculture, forestry, and fishing; mining; and gas and electricity and public utilities sectors. The stage-of-processing structure of PPI organizes products by class of buyer and degree of fabrication (that is, finished goods, intermediate goods, and crude materials). The traditional commodity structure of PPI organizes products by similarity of end use or material composition. The industry and product structure of PPI organizes data in accordance with the Standard Industrial Classification (SIC) and the product code extension of the SIC developed by the U.S. Bureau of the Census.

To the extent possible, prices used in calculating Producer Price Indexes apply to the first significant commercial transaction in the United States from the production or central marketing point. Price data are generally collected monthly, primarily by mail questionnaire. Most prices are obtained directly from producing companies on a voluntary and confidential basis. Prices generally are reported for the Tuesday of the week containing the 13th day of the month.

Since January 1992, price changes for the various commodities have been averaged together with implicit quantity weights representing their importance in the total net selling value of all commodities as of 1987. The detailed data are aggregated to obtain indexes for stage-of-processing groupings, commodity groupings, durability-of-product groupings, and a number of special composite groups. All Producer Price Index data are subject to revision 4 months after original publication.

FOR ADDITIONAL INFORMATION on producer prices, contact the Division of Industrial Prices and Price Indexes: (202) 691–7705.

International Price Indexes

Description of the series

The **International Price Program** produces monthly and quarterly export and import price indexes for nonmilitary goods and services traded between the United States and the rest of the world. The export price index provides a measure of price change for all products sold by U.S. residents to foreign buyers. ("Residents" is defined as in the national income accounts; it includes corporations, businesses, and individuals, but does not require the organizations to be U.S. owned nor the individuals to have U.S. citizenship.) The import price index provides a measure of price change for goods purchased from other countries by U.S. residents.

The product universe for both the import and export indexes includes raw materials, agricultural products, semifinished manufactures, and finished manufactures, including both capital and consumer goods. Price data for these items are collected primarily by mail questionnaire. In nearly all cases, the data are collected directly from the exporter or importer, although in a few cases, prices are obtained from other sources.

To the extent possible, the data gathered refer to prices at the U.S. border for exports and at either the foreign border or the U.S. border for imports. For nearly all products, the prices refer to transactions completed during the first week of the month. Survey respondents are asked to indicate all discounts, allowances, and rebates applicable to the reported prices, so that the price used in the calculation of the indexes is the actual price for which the product was bought or sold.

In addition to general indexes of prices for U.S. exports and imports, indexes are also published for detailed product categories of exports and imports. These categories are defined according to the five-digit level of detail for the Bureau of Economic Analysis End-use Classification, the three-digit level for the Standard Industrial Classification (SITC), and the four-digit level of detail for the Harmonized System. Aggregate import indexes by coun-try or region of origin are also available.

BLS publishes indexes for selected categories of internationally traded services, calculated on an international basis and on a balance-of-payments basis.

Notes on the data

The export and import price indexes are weighted indexes of the Laspeyres type. The trade weights currently used to compute both indexes relate to 2000.

Because a price index depends on the same items being priced from period to period, it is necessary to recognize when a product's specifications or terms of transaction have been modified. For this reason, the Bureau's questionnaire requests detailed descriptions of the physical and functional characteristics of the products being priced, as well as information on the number of units bought or sold, discounts, credit terms, packaging, class of buyer or seller, and so forth. When there are changes in either the specifications or terms of transaction of a product, the dollar value of each change is deleted from the total price change to obtain the "pure" change. Once this value is determined, a linking procedure is employed which allows for the continued repricing of the item.

FOR ADDITIONAL INFORMATION on international prices, contact the Division of International Prices: (202) 691–7155.

Productivity Data

(Tables 2; 43–46)

Business sector and major sectors

Description of the series

The productivity measures relate real output to real input. As such, they encompass a family of measures which include single-factor input measures, such as output per hour, output per unit of labor input, or output per unit of capital input, as well as measures of multifactor productivity (output per unit of combined labor and capital inputs). The Bureau indexes show the change in output relative to changes in the various inputs. The measures cover the business, nonfarm business, manufacturing, and nonfinancial corporate sectors.

Corresponding indexes of hourly compensation, unit labor costs, unit nonlabor payments, and prices are also provided.

Definitions

Output per hour of all persons (labor productivity) is the quantity of goods and services produced per hour of labor input. **Output per unit of capital services** (capital productivity) is the quantity of goods and services produced per unit of capital services input. **Multifactor productivity** is the quantity of goods and services produced per combined inputs. For private business and private nonfarm business, inputs include labor and capital units. For manufacturing, inputs include labor, capital, energy, non-energy materials, and purchased business ser-vices.

Compensation per hour is total compensation divided by hours at work. Total compensation equals the wages and salaries of employees plus employers' contributions for social insurance and private benefit plans, plus an estimate of these payments for the self-employed (except for nonfinancial corporations in which there are no self-employed). **Real compensation per hour** is compensation per hour deflated by the change in the Consumer Price Index for All Urban Consumers.

Unit labor costs are the labor compensation costs expended in the production of a unit of output and are derived by dividing compensation by output. **Unit nonlabor payments** include profits, depreciation, interest, and indirect taxes per unit of output. They are computed by subtracting compensation of all persons from current-dollar value of output and dividing by output.

Unit nonlabor costs contain all the components of unit nonlabor payments except unit profits.

Unit profits include corporate profits with inventory valuation and capital consumption adjustments per unit of output.

Hours of all persons are the total hours at work of payroll workers, self-employed persons, and unpaid family workers.

Labor inputs are hours of all persons adjusted for the effects of changes in the education and experience of the labor force.

Capital services are the flow of services from the capital stock used in production. It is developed from measures of the net stock of physical assets—equipment, structures, land, and inventories—weighted by rental prices for each type of asset.

Combined units of labor and capital inputs are derived by combining changes in labor and capital input with weights which represent each component's share of total cost. Combined units of labor, capital, energy, materials, and purchased business services are similarly derived by combining changes in each input with weights that represent each input's share of total costs. The indexes for each input and for combined units are based on changing weights which are averages of the shares in the current and preceding year (the Tornquist index-number formula).

Notes on the data

Business sector output is an annually-weighted index constructed by excluding from real gross domestic product (GDP) the following outputs: general government, nonprofit institutions, paid employees of private households, and the rental value of owner-occupied dwellings. Nonfarm business also excludes farming. Private business and private nonfarm business further exclude government enterprises. The measures are supplied by the U.S. Department of Commerce's Bureau of Economic Analysis. Annual estimates of manufacturing sectoral output are produced by the Bureau of Labor Statistics. Quarterly manufacturing output indexes from the Federal Reserve Board are adjusted to these annual output measures by the BLS. Compensation data are developed from data of the Bureau of Economic Analysis and the Bureau of Labor Statistics. Hours data are developed from data of the Bureau of Labor Statistics.

The productivity and associated cost measures in tables 43–46 describe the relationship between output in real terms and the labor and capital inputs involved in its production. They show the changes from period to period in the amount of goods and services produced per unit of input.

Although these measures relate output to hours and capital services, they do not measure the contributions of labor, capital, or any other specific factor of production. Rather, they reflect the joint effect of many influences, including changes in technology; shifts in the composition of the labor force; capital investment; level of output; changes in the utilization of capacity, energy, material, and research and development; the organization of production; managerial skill; and characteristics and efforts of the work force.

FOR ADDITIONAL INFORMATION on this productivity series, contact the Division of Productivity Research: (202) 691–5606.

Industry productivity measures

Description of the series

The BLS industry productivity data supplement the measures for the business economy and major sectors with annual measures of labor productivity for selected industries at the three- and four-digit levels of the Standard Industrial Classification system. In addition to labor productivity, the industry data also include annual measures of compensation and unit labor costs for three-digit industries and measures of multifactor productivity for three-digit manufacturing industries and railroad transportation. The industry measures differ in methodology and data sources from the productivity measures for the major sectors because the industry measures are developed independently of the National Income and Product Accounts framework used for the major sector measures.

Definitions

Output per hour is derived by dividing an index of industry output by an index of labor input. For most industries, **output** indexes are derived from data on the value of industry output adjusted for price change. For the remaining industries, output indexes are derived from data on the physical quantity of production.

The **labor input** series consist of the hours of all employees (production workers and nonproduction workers), the hours of all persons (paid employees, partners, proprietors, and unpaid family workers), or the number of employees, depending upon the industry.

Unit labor costs represent the labor compensation costs per unit of output produced, and are derived by dividing an index of labor compensation by an index of output. **Labor compensation** includes payroll as well as supplemental payments, including both legally required expenditures and payments for voluntary programs.

Multifactor productivity is derived by dividing an index of industry output by an index of the combined inputs consumed in producing that output. **Combined inputs** include capital, labor, and intermediate purchases. The measure of **capital input** used represents the flow of services from the capital stock used in production. It is developed from measures of the net stock of physical assets—equipment, structures, land, and inventories. The measure of **intermediate purchases** is a combination of purchased materials, services, fuels, and electricity.

Notes on the data

The industry measures are compiled from data produced by the Bureau of Labor Statistics and the Bureau of the Census, with additional data supplied by other government agencies, trade associations, and other sources.

For most industries, the productivity indexes refer to the output per hour of all employees. For some trade and services industries, indexes of output per hour of all persons (including self-employed) are constructed. For some transportation industries, only indexes of output per employee are prepared.

FOR ADDITIONAL INFORMATION on this series, contact the Division of Industry Productivity Studies: (202) 691–5618.

International Comparisons

(Tables 47–49)

Labor force and unemployment

Description of the series

Tables 47 and 48 present comparative measures of the labor force, employment, and unemployment—approximating U.S. concepts—for the United States, Canada, Australia, Japan, and several European countries. The unemployment statistics (and, to a lesser extent, employment statistics) published by other industrial countries are not, in most cases, comparable to U.S. unemployment statistics. Therefore, the Bureau adjusts the figures for selected countries, where necessary, for all known major definitional differences. Although precise comparability may not be achieved, these adjusted figures provide a better basis for international comparisons than the figures regularly published by each country. For further information on adjustments and comparability issues, see Constance Sorrentino, "International unemployment rates: how comparable are they?" *Monthly Labor Review*, June 2000, pp. 3-20.

Definitions

For the principal U.S. definitions of the **labor force**, **employment**, and **unemployment**, see the Notes section on Employment and Unemployment Data: Household survey data.

Notes on the data

The adjusted statistics have been adapted to the age at which compulsory schooling ends in each country, rather than to the U.S. standard of 16 years of age and older. Therefore, the adjusted statistics relate to the population aged 16 and older in France, Sweden, and the United Kingdom; 15 and older in Australia, Japan, Germany, Italy from 1993 onward, and the Netherlands; and 14 and older in Italy prior to 1993. An exception to this rule is that the Canadian statistics for 1976 onward are adjusted to cover ages 16 and older, whereas the age at which compulsory schooling ends remains at 15. The institutional population is included in the denominator of the labor force participation rates and employment-population ratios for Japan and Germany; it is excluded for the United States and the other countries.

In the U.S. labor force survey, persons on layoff who are awaiting recall to their jobs are classified as unemployed. European and Japanese layoff practices are quite different in nature from those in the United States; therefore, strict application of the U.S. definition has not been made on this point. For further information, see *Monthly Labor Review*, December 1981, pp. 8–11.

The figures for one or more recent years for France, Germany, Italy, the Netherlands, and the United Kingdom are calculated using adjustment factors based on labor force surveys for earlier years and are considered preliminary. The recent-year measures for these countries, therefore, are subject to revision whenever data from more current labor force surveys become available.

There are breaks in the data series for the United States (1990, 1994, 1997, 1998, 1999, 2000), Canada (1976) France (1992), Germany (1991), Italy (1991, 1993), the Netherlands (1988), and Sweden (1987).

For the United States, the break in series reflects a major redesign of the labor force survey questionnaire and collection methodology introduced in January 1994. Revised population estimates based on the 1990 census, adjusted for the estimated undercount, also were incorporated. In 1996, previously published data for the 1990–93 period were revised to reflect the 1990 census-based population controls, adjusted for the undercount. In 1997, revised population controls were introduced into the household survey. Therefore, the data are not strictly comparable with prior years. In 1998, new composite estimation procedures and minor revisions in population controls were introduced into the household survey. Therefore, the data are not strictly comparable with data for 1997 and earlier years. See the Notes section on Employment and Unemployment Data of this *Review*.

BLS recently introduced a new adjusted series for Canada. Beginning with the data for 1976, Canadian data are adjusted to more closely approximate U.S. concepts. Adjustments are made to the unemployed and labor force to exclude: (1) 15-year-olds; (2) passive jobseekers (persons only reading newspaper ads as their method of job search); (3) persons waiting to start a new job who did not seek work in the past 4 weeks; and (4) persons unavailable for work due to personal or family responsibilities. An adjustment is made to include full-tine students looking for full-time work. The impact of the adjustments was to lower the annual average unemployment rate by 0.1–0.4 percentage point in the 1980s and 0.4–1.0 percentage point in the 1990s.

For France, the 1992 break reflects the substitution of standardized European Union Statistical Office (EUROSTAT) unemployment statistics for the unemployment data estimated according to the International Labor Office (ILO) definition and published in the Organization for Economic Cooperation and Development (OECD) annual yearbook and quarterly update. This change was made because the EUROSTAT data are more up-to-date than the OECD figures. Also, since 1992, the EUROSTAT definitions are closer to the U.S. definitions than they were in prior years. The impact of this revision was to lower the unemployment rate by 0.1 percentage point in 1992 and 1993, by 0.4 percentage point in 1994, and 0.5 percentage point in 1995.

For Germany, the data for 1991 onward refer to unified Germany. Data prior to 1991 relate to the former West Germany. The impact of including the former East Germany was to increase the unemployment rate from 4.3 to 5.6 percent in 1991.

For Italy, the 1991 break reflects a revision in the method of weighting sample data. The impact was to increase the unemployment rate by approximately 0.3 percentage point, from 6.6 to 6.9 percent in 1991.

In October 1992, the survey methodology was revised and the definition of unemployment was changed to include only those who were actively looking for a job within the 30 days preceding the survey and who were available for work. In addition, the lower age limit for the labor force was raised from 14 to 15 years. (Prior to these changes, BLS adjusted Italy's published unemployment rate downward by excluding from the unemployed those persons who had not actively sought work in the past 30 days.) The break in the series also reflects the incorporation of the 1991 population census results. The impact of these changes was to raise Italy's adjusted unemployment rate by approximately 1.2 percentage points, from 8.3 to 9.5 percent in fourth-quarter 1992. These changes did not affect employment significantly, except in 1993. Estimates by the Italian Statistical Office indicate that employment declined by about 3 percent in 1993, rather than the nearly 4 percent indicated by the data shown in table 44. This difference is attributable mainly to the incorporation of the 1991 population benchmarks in the 1993 data. Data for earlier years have not been adjusted to incorporate the 1991 census results.

For the Netherlands, a new survey questionnaire was introduced in 1992 that allowed for a closer application of ILO guidelines. EUROSTAT has revised the Dutch series back to 1988 based on the 1992 changes. The 1988 revised unemployment rate is 7.6 percent; the previous estimate for the same year was 9.3 percent.

There have been two breaks in series in the Swedish labor force survey, in 1987 and 1993. Adjustments have been made for the 1993 break back to 1987. In 1987, a new questionnaire was introduced. Questions regarding current availability were added and the period of active workseeking was reduced from 60 days to 4 weeks. These changes lowered Sweden's 1987 unemployment rate by 0.4 percentage point, from 2.3 to 1.9 percent. In 1993, the measurement period for the labor force survey was changed to represent all 52 weeks of the year rather than one week each month and a new adjustment for population totals was introduced. The impact was to raise the unemployment rate by approximately 0.5 percentage point, from 7.6 to 8.1 percent. Statistics Sweden revised its labor force survey data for 1987–92 to take into account the break in 1993. The adjustment raised the Swedish unemployment rate by 0.2 percentage point in 1987 and gradually rose to 0.5 percentage point in 1992.

Beginning with 1987, BLS has adjusted the Swedish data to classify students who also sought work as unemployed. The impact of this change was to increase the adjusted unemployment rate by 0.1 percentage point in 1987 and by 1.8 percentage points in 1994, when unemployment was higher. In 1998, the adjusted unemployment rate had risen from 6.5 to 8.4 percent due to the adjustment to include students.

The net effect of the 1987 and 1993 changes and the BLS adjustment for students seeking work lowered Sweden's 1987 unemployment rate from 2.3 to 2.2 percent.

FOR ADDITIONAL INFORMATION on this series, contact the Division of Foreign Labor Statistics: (202) 691–5654.

Manufacturing productivity and labor costs

Description of the series

Table 49 presents comparative indexes of manufacturing labor productivity (output per hour), output, total hours, compensation per hour, and unit labor costs for the United States, Canada, Japan, and nine European countries. These measures are trend comparisons—that is, series that measure changes over time—rather than level comparisons. There are greater technical problems in comparing the levels of manufacturing output among countries.

BLS constructs the comparative indexes from three basic aggregate measures—output, total labor hours, and total compensation. The hours and compensation measures refer to all employed persons (wage and salary earners plus self-employed persons and unpaid family workers) in the United States, Canada, Japan, France, Germany, Norway, and Sweden, and to all employees (wage and salary earners) in the other countries.

Definitions

Output, in general, refers to value added in manufacturing from the national accounts of each country. However, the output series for Japan prior to 1970 is an index of industrial production, and the national accounts measures for the United Kingdom are essentially identical to their indexes of industrial production.

The 1977–97 output data for the United States are the gross product originating (value added) measures prepared by the Bureau of Economic Analysis of the U.S. Department of Commerce. Comparable manufacturing output data currently are not available prior to 1977.

U.S. gross product originating is a chain-type annual-weighted series. (For more information on the U.S. measure, see Robert E. Yuskavage, "Improved Estimates of Gross Product by Industry, 1959–94," *Survey of Current Business*, August 1996, pp. 133–55.) The Japanese value added series is based upon one set of fixed price weights for the years 1970 through 1997. Output series for the other foreign economies also employ fixed price weights, but the weights are updated periodically (for example, every 5 or 10 years).

To preserve the comparability of the U.S. measures with those for other economies, BLS uses gross product originating in manufacturing for the United States for these comparative measures. The gross product originating series differs from the manufacturing output series that BLS publishes in its news releases on quarterly measures of U.S. productivity and costs (and that underlies the measures that appear in tables 43 and 45 in this section). The quarterly measures are on a "sectoral output" basis, rather than a value-added basis. Sectoral output is gross output less intrasector transactions.

Total labor hours refers to hours worked in all countries. The measures are developed from statistics of manufacturing employment and average hours. The series used for France (from 1970 forward), Norway, and Sweden are official series published with the national accounts. Where official total hours series are not available, the measures are developed by BLS using employment figures published with the national accounts, or other comprehensive employment series, and estimates of annual hours worked. For Germany, BLS uses estimates of average hours worked developed by a research institute connected to the Ministry of Labor for use with the national accounts employment figures. For the other countries, BLS constructs its own estimates of average hours.

Denmark has not published estimates of average hours for 1994–97; therefore, the BLS measure of labor input for Denmark ends in 1993.

Total compensation (labor cost) includes all payments in cash or in-kind made directly to employees plus employer expenditures for legally required insurance programs and contractual and private benefit plans. The measures are from the national accounts of each country, except those for Belgium, which are developed by BLS using statistics on employment, average hours, and hourly compensation. For Canada, France, and Sweden, compensation is increased to account for other significant taxes on payroll or employment. For the United Kingdom, compensation is reduced between 1967 and 1991 to account for employment-related subsidies. Self-employed workers are included in the all-employed-persons measures by assuming that their hourly compensation is equal to the average for wage and salary employees.

Notes on the data

In general, the measures relate to total manufacturing as defined by the International Standard Industrial Classification. However, the measures for France (for all years) and Italy (beginning 1970) refer to mining and manufacturing less energy-related products, and the measures for Denmark include mining and exclude manufacturing handicrafts from 1960 to 1966.

The measures for recent years may be based on current indicators of manufacturing output (such as industrial production indexes), employment, average hours, and hourly compensation until national accounts and other statistics used for the long-term measures become available.

FOR ADDITIONAL INFORMATION on this series, contact the Division of Foreign Labor Statistics: (202) 691–5654.

Occupational Injury and Illness Data

(Tables 50–51)

Survey of Occupational Injuries and Illnesses

Description of the series

The Survey of Occupational Injuries and Illnesses collects data from employers about their workers' job-related nonfatal injuries and illnesses. The information that employers provide is based on records that they maintain under the Occupational Safety and Health Act of

1970. Self-employed individuals, farms with fewer than 11 employees, employers regulated by other Federal safety and health laws, and Federal, State, and local government agencies are excluded from the survey.

The survey is a Federal-State cooperative program with an independent sample selected for each participating State. A stratified random sample with a Neyman allocation is selected to represent all private industries in the State. The survey is stratified by Standard Industrial Classification and size of employment.

Definitions

Under the Occupational Safety and Health Act, employers maintain records of nonfatal work-related injuries and illnesses that involve one or more of the following: loss of consciousness, restriction of work or motion, transfer to another job, or medical treatment other than first aid.

Occupational injury is any injury such as a cut, fracture, sprain, or amputation that results from a work-related event or a single, instantaneous exposure in the work environment.

Occupational illness is an abnormal condition or disorder, other than one resulting from an occupational injury, caused by exposure to factors associated with employment. It includes acute and chronic illnesses or disease which may be caused by inhalation, absorption, ingestion, or direct contact.

Lost workday injuries and illnesses are cases that involve days away from work, or days of restricted work activity, or both.

Lost workdays include the number of workdays (consecutive or not) on which the employee was either away from work or at work in some restricted capacity, or both, because of an occupational injury or illness. BLS measures of the number and incidence rate of lost workdays were discontinued beginning with the 1993 survey. The number of days away from work or days of restricted work activity does not include the day of injury or onset of illness or any days on which the employee would not have worked, such as a Federal holiday, even though able to work.

Incidence rates are computed as the number of injuries and/or illnesses or lost work days per 100 full-time workers.

Notes on the data

The definitions of occupational injuries and illnesses are from *Recordkeeping Guidelines for Occupational Injuries and Illnesses* (U.S. Department of Labor, Bureau of Labor Statistics, September 1986).

Estimates are made for industries and employment size classes for total recordable cases, lost workday cases, days away from work cases, and nonfatal cases without lost workdays. These data also are shown separately for injuries. Illness data are available for seven categories: occupational skin diseases or disorders, dust diseases of the lungs, respiratory conditions due to toxic agents, poisoning (systemic effects of toxic agents), disorders due to physical agents (other than toxic materials), disorders associated with repeated trauma, and all other occupational illnesses.

The survey continues to measure the number of new work-related illness cases which are recognized, diagnosed, and reported during the year. Some conditions, for example, long-term latent illnesses caused by exposure to carcinogens, often are difficult to relate to the workplace and are not adequately recognized and reported. These long-term latent illnesses are believed to be understated in the survey's illness measure. In contrast, the overwhelming majority of the reported new illnesses are those which are easier to directly relate to workplace activity (for example, contact dermatitis and carpal tunnel syndrome).

Most of the estimates are in the form of incidence rates, defined as the number of injuries and illnesses per 100 equivalent full-time workers. For this purpose, 200,000 employee hours represent 100 employee years (2,000 hours per employee). Full detail on the available measures is presented in the annual bulletin, *Occupational Injuries and Illnesses: Counts, Rates, and Characteristics.*

Comparable data for more than 40 States and territories are available from the BLS Office of Safety, Health and Working Conditions. Many of these States publish data on State and local government employees in addition to private industry data.

Mining and railroad data are furnished to BLS by the Mine Safety and Health Administration and the Federal Railroad Administration. Data from these organizations are included in both the national and State data published annually.

With the 1992 survey, BLS began publishing details on serious, nonfatal incidents resulting in days away from work. Included are some major characteristics of the injured and ill workers, such as occupation, age, gender, race, and length of service, as well as the circumstances of their injuries and illnesses (nature of the disabling condition, part of body affected, event and exposure, and the source directly producing the condition). In general, these data are available nationwide for detailed industries and for individual States at more aggregated industry levels.

For additional information on occupational injuries and illnesses, contact the Office of Occupational Safety, Health and Working Conditions at (202) 691–6180, or access the Internet at:

http://www.bls.gov/iip/

Census of Fatal Occupational Injuries

The Census of Fatal Occupational Injuries compiles a complete roster of fatal job-related injuries, including detailed data about the fatally injured workers and the fatal events. The program collects and cross checks fatality information from multiple sources, including death certificates, State and Federal workers' compensation reports, Occupational Safety and Health Administration and Mine Safety and Health Administration records, medical examiner and autopsy reports, media accounts, State motor vehicle fatality records, and follow-up questionnaires to employers.

In addition to private wage and salary workers, the self-employed, family members, and Federal, State, and local government workers are covered by the program. To be included in the fatality census, the decedent must have been employed (that is working for pay, compensation, or profit) at the time of the event, engaged in a legal work activity, or present at the site of the incident as a requirement of his or her job.

Definition

A fatal work injury is any intentional or unintentional wound or damage to the body resulting in death from acute exposure to energy, such as heat or electricity, or kinetic energy from a crash, or from the absence of such essentials as heat or oxygen caused by a specific event or incident or series of events within a single workday or shift. Fatalities that occur during a person's commute to or from work are excluded from the census, as well as work-related illnesses, which can be difficult to identify due to long latency periods.

Notes on the data

Twenty-eight data elements are collected, coded, and tabulated in the fatality program, including information about the fatally injured worker, the fatal incident, and the machinery or equipment involved. Summary worker demographic data and event characteristics are included in a national news release that is available about 8 months after the end of the reference year. The Census of Fatal Occupational Injuries was initiated in 1992 as a joint Federal-State effort. Most States issue summary information at the time of the national news release.

FOR ADDITIONAL INFORMATION on the Census of Fatal Occupational Injuries contact the BLS Office of Safety, Health, and Working Conditions at (202) 691–6175, or the Internet at: **http://www.bls.gov/iif/**

Bureau of Labor Statistics Internet

The Bureau of Labor Statistics World Wide Web site on the Internet contains a range of data on consumer and producer prices, employment and unemployment, occupational compensation, employee benefits, workplace injuries and illnesses, and productivity. The homepage can be accessed using any Web browser:

http://www.bls.gov

Also, some data can be accessed through anonymous FTP or Gopher at

stats.bls.gov

1. Labor market indicators

Selected indicators	2000	2001	2000				2001				2002
			I	II	III	IV	I	II	III	IV	I
Employment data											
Employment status of the civilian noninstitutionalized population (household survey):[1]											
Labor force participation rate	67.2	66.9	67.3	67.3	67.0	67.1	67.2	66.9	66.8	66.9	66.5
Employment-population ratio	64.5	63.8	64.6	64.6	64.3	64.4	64.4	63.9	63.6	63.1	62.8
Unemployment rate	4.0	4.8	4.0	4.0	4.1	4.0	4.2	4.5	4.8	5.6	5.6
Men	3.9	4.8	3.9	3.9	3.9	4.0	4.2	4.6	4.9	5.7	5.7
16 to 24 years	9.7	11.4	9.7	9.7	9.8	9.8	10.6	11.2	11.5	12.7	12.9
25 years and over	2.8	3.6	2.8	2.8	2.8	2.9	3.1	3.4	3.7	4.4	4.5
Women	4.1	4.7	4.2	4.1	4.2	4.0	4.1	4.3	4.8	5.5	5.5
16 to 24 years	8.9	9.7	9.5	9.0	8.5	8.4	8.7	9.2	10.0	10.6	11.0
25 years and over	3.2	3.7	3.1	3.2	3.3	3.0	3.3	3.4	3.7	4.4	4.4
Employment, nonfarm (payroll data), in thousands:[1]											
Total	131,759	132,212	130,984	131,854	131,927	132,284	132,559	132,483	132,358	131,502	131,202
Private sector	111,079	111,339	110,456	110,917	111,293	111,669	111,886	111,702	111,385	110,480	110,111
Goods-producing	25,709	25,121	25,704	25,711	25,732	25,704	25,621	25,310	24,991	14,590	24,225
Manufacturing	18,469	17,698	18,504	18,510	18,487	18,378	18,188	17,882	17,556	17,174	16,874
Service-producing	106,050	107,090	105,280	106,143	106,195	106,560	106,938	107,173	107,367	106,912	106,978
Average hours:											
Private sector	34.5	34.2	34.5	34.5	34.4	34.3	34.3	34.2	34.1	34.1	34.1
Manufacturing	41.6	40.7	41.8	41.8	41.5	41.1	41.0	40.8	40.7	40.5	40.8
Overtime	4.6	3.9	4.7	4.7	4.5	4.3	4.1	3.9	4.0	3.8	4.0
Employment Cost Index[2]											
Percent change in the ECI, compensation:											
All workers (excluding farm, household and Federal workers)	4.1	4.1	1.3	1.0	1.0	.7	1.3	.9	1.2	.8	1.0
Private industry workers	4.4	4.2	1.5	1.2	.9	.7	1.4	1.0	.9	.8	1.1
Goods-producing[3]	4.4	3.8	1.6	1.2	.9	.6	1.3	.9	.7	.8	1.2
Service-producing[3]	4.4	4.3	1.4	1.2	1.0	.7	1.4	1.0	1.0	.8	1.1
State and local government workers	3.0	4.2	.6	.3	1.3	.7	.9	.6	2.1	.6	.6
Workers by bargaining status (private industry):											
Union	4.0	4.2	1.3	1.0	1.2	.5	.7	1.1	1.0	1.4	1.1
Nonunion	4.4	4.1	1.5	1.2	1.0	.7	1.5	1.0	.9	.7	1.1

[1] Quarterly data seasonally adjusted.

[2] Annual changes are December-to-December changes. Quarterly changes are calculated using the last month of each quarter.

[3] Goods-producing industries include mining, construction, and manufacturing. Service-producing industries include all other private sector industries.

2. Annual and quarterly percent changes in compensation, prices, and productivity

Selected measures	2000	2001	2000				2001				2002
			I	II	III	IV	I	II	III	IV	I
Compensation data[1,2]											
Employment Cost Index—compensation (wages, salaries, benefits):											
Civilian nonfarm	4.1	4.1	1.3	1.0	1.0	0.7	1.3	0.9	1.2	0.8	1.0
Private nonfarm	4.4	4.2	1.5	1.2	.9	.7	1.4	1.0	.9	.8	1.1
Employment Cost Index—wages and salaries:											
Civilian nonfarm	3.8	3.7	1.1	1.0	1.1	.6	1.1	.9	1.0	.7	.9
Private nonfarm	3.9	3.8	1.2	1.0	1.0	.6	1.2	1.0	.8	.8	.9
Price data[1]											
Consumer Price Index (All Urban Consumers): All Items	1.6	3.4	1.7	.7	.8	.2	1.3	1.0	.2	–.9	.7
Producer Price Index:											
Finished goods	3.5	–1.8	1.5	1.8	.6	.4	.9	.8	–.3	–3.2	1.1
Finished consumer goods	4.3	–2.4	1.9	1.3	.8	.1	1.2	1.0	–.3	–4.3	1.5
Capital equipment	1.2	1.0	.1	.1	–7.2	1.1	–.1	–7.1	–.1	.1	2.9
Intermediate materials, supplies, and components	4.0	–.2	1.8	1.4	1.0	–.3	.2	.6	–1.0	–3.8	.9
Crude materials	31.1	–8.8	9.0	–6.0	2.1	9.4	–3.5	–6.6	–12.0	–12.2	8.0
Productivity data[3]											
Output per hour of all persons:											
Business sector	3.4	1.8	–.1	7.7	1.2	3.0	–.2	2.2	.7	5.4	8.3
Nonfarm business sector	3.3	1.8	.0	6.7	1.6	2.3	–.1	2.1	1.1	5.5	8.4
Nonfinancial corporations[4]	3.1	–	2.8	5.6	2.6	.7	.5	3.3	.9	11.2	6.7

[1] Annual changes are December-to-December changes. Quarterly changes are calculated using the last month of each quarter. Compensation and price data are not seasonally adjusted, and the price data are not compounded.

[2] Excludes Federal and private household workers.

[3] Annual rates of change are computed by comparing annual averages. Quarterly percent changes reflect annual rates of change in quarterly indexes. The data are seasonally adjusted.

[4] Output per hour of all employees.

3. Alternative measures of wage and compensation changes

Components	Quarterly average					Four quarters ending				
	2001				2002	2001				2002
	I	II	III	IV	I	I	II	III	IV	I
Average hourly compensation:[1]										
All persons, business sector	5.1	5.2	3.3	2.3	2.9	7.6	6.6	5.8	4.0	3.4
All persons, nonfarm business sector	4.9	4.7	3.7	2.3	2.8	7.3	6.5	5.5	3.9	3.4
Employment Cost Index—compensation:										
Civilian nonfarm[2]	1.3	.9	1.2	.8	1.0	4.1	3.9	4.1	4.1	3.9
Private nonfarm	1.4	1.0	.9	.8	1.1	4.2	4.0	4.0	4.2	3.9
Union	.7	1.1	1.0	1.4	1.1	3.4	3.5	3.4	4.2	4.7
Nonunion	1.5	1.0	.9	.7	1.1	4.3	4.2	4.1	4.1	3.8
State and local governments	.9	.6	2.1	.6	.6	3.3	3.6	4.4	4.2	3.9
Employment Cost Index—wages and salaries:										
Civilian nonfarm[2]	1.1	.9	1.0	.7	.9	3.8	3.7	3.6	3.7	3.5
Private nonfarm	1.2	1.0	.8	.8	.9	3.8	3.8	3.6	3.8	3.5
Union	.6	1.1	1.0	1.6	.7	3.6	3.8	3.6	4.4	4.4
Nonunion	1.2	.9	.8	.7	1.0	3.9	3.7	3.6	3.6	3.4
State and local governments	.7	.5	1.9	.5	.5	3.5	3.7	3.9	3.6	3.4

[1] Seasonally adjusted. "Quarterly average" is percent change from a quarter ago, at an annual rate.

[2] Excludes Federal and household workers.

4. Employment status of the population, by sex, age, race, and Hispanic origin, monthly data seasonally adjusted

[Numbers in thousands]

Employment status	Annual average		2001										2002		
	2000	2001	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
TOTAL															
Civilian noninstitutional population[1]	209,699	211,864	211,171	211,348	211,525	211,725	211,921	212,135	212,357	212,581	212,767	212,927	213,089	213,206	213,334
Civilian labor force	140,863	141,815	141,869	141,734	141,445	141,488	141,651	141,380	142,068	142,280	142,279	141,390	141,390	142,221	142,092
Participation rate	67.2	66.9	67.2	67.1	66.9	66.8	66.8	66.6	66.9	66.9	66.9	66.8	66.4	66.7	66.6
Employed	135,208	135,073	135,808	135,424	135,235	135,003	135,106	134,408	135,004	134,615	134,253	134,055	133,468	134,319	133,433
Employment-population ratio[2]	64.5	63.8	64.3	64.1	63.9	63.8	63.8	63.4	63.6	63.3	63.1	63.0	62.6	63.0	62.5
Unemployed	5,665	6,742	6,061	6,310	6,210	6,465	6,545	6,972	7,064	7,665	8,026	8,259	7,922	7,891	8,659
Unemployment rate	4.0	4.8	4.3	4.5	4.4	4.6	4.6	4.9	5.0	5.4	5.6	5.8	5.6	5.5	6.1
Not in the labor force	68,836	70,050	69,302	69,614	70,080	70,257	70,270	70,755	70,289	70,301	70,488	70,613	71,699	70,995	71,243
Men, 20 years and over															
Civilian noninstitutional population[1]	92,580	93,659	93,285	93,410	93,541	93,616	93,708	93,810	93,917	94,015	94,077	94,161	94,228	94,262	94,315
Civilian labor force	70,930	71,590	71,300	71,541	71,468	71,429	71,500	71,523	71,805	71,940	71,935	71,988	71,534	71,718	71,846
Participation rate	76.6	76.4	76.4	76.6	76.3	76.3	76.3	76.2	76.5	76.5	76.5	76.5	75.9	76.1	76.2
Employed	68,580	68,587	68,619	68,720	68,698	68,535	68,610	68,388	68,696	68,486	68,204	68,276	67,818	68,157	67,591
Employment-population ratio[2]	74.1	73.2	73.6	73.6	73.4	73.2	73.2	72.9	83.1	72.8	72.5	72.5	72.0	72.3	71.7
Agriculture	2,252	2,102	2,150	2,105	2,168	2,057	2,035	2,129	2,138	2,132	2,082	2,141	2,207	2,185	1,926
Nonagricultural industries	66,328	66,485	66,469	66,615	66,530	66,478	66,575	66,259	66,558	66,354	66,122	66,135	65,611	65,973	65,665
Unemployed	2,350	3,003	2,681	2,821	2,770	2,894	2,890	3,135	3,109	3,454	3,731	3,712	3,716	3,560	4,255
Unemployment rate	3.3	4.2	3.8	3.9	3.9	4.1	4.0	4.4	4.3	4.8	5.2	5.2	5.2	5.0	5.9
Women, 20 years and over															
Civilian noninstitutional population[1]	101,078	102,060	101,779	101,870	101,938	102,023	102,067	102,165	102,277	102,371	102,438	102,492	102,550	102,651	102,728
Civilian labor force	61,565	62,148	62,331	61,102	62,068	61,961	62,103	62,142	62,222	62,269	62,321	62,481	62,056	62,703	62,768
Participation rate	60.9	60.9	61.2	61.0	60.9	60.7	60.8	60.8	60.8	60.8	60.8	61.0	60.5	61.1	61.1
Employed	59,352	59,596	60,089	59,758	59,716	59,555	59,640	59,526	59,463	59,302	59,298	59,205	59,102	59,588	59,619
Employment-population ratio[2]	58.7	58.4	59.0	58.7	58.6	58.4	58.4	58.3	58.1	57.9	57.9	57.8	57.6	58.0	58.0
Agriculture	818	82	811	827	816	772	784	781	823	842	852	859	824	829	787
Nonagricultural industries	58,535	58,779	59,278	58,931	58,900	58,783	58,856	58,745	58,640	58,460	58,436	58,346	58,277	58,759	58,832
Unemployed	2,212	2,551	2,242	2,344	2,352	2,406	2,463	2,616	2,759	2,967	3,303	3,276	2,954	3,116	3,149
Unemployment rate	3.6	4.1	3.6	3.8	3.8	3.9	4.0	4.2	4.4	3.8	4.9	5.2	4.8	5.0	5.0
Both sexes, 16 to 19 years															
Civilian noninstitutional population[1]	16,042	16,146	16,108	16,068	16,046	16,086	16,145	16,161	16,163	16,195	16,252	16,275	16,310	16,293	16,292
Civilian labor force	8,369	8,077	8,238	8,091	7,909	8,078	8,048	7,715	8,041	8,071	8,023	7,845	7,800	7,790	7,478
Participation rate	52.2	50.0	51.1	50.4	49.3	50.2	49.8	47.7	49.7	49.8	49.4	48.2	47.8	47.8	45.9
Employed	7,276	6,889	7,100	6,946	6,821	6,913	6,856	6,494	6,845	6,827	6,761	6,574	6,548	6,575	6,223
Employment-population ratio[2]	45.4	42.7	44.1	43.2	42.5	43.0	42.5	40.2	42.3	42.2	41.6	40.4	40.1	40.4	38.2
Agriculture	235	225	202	235	209	215	236	216	220	229	220	246	241	233	169
Nonagricultural industries	7,041	6,664	6,898	6,711	6,612	6,698	6,620	6,278	6,625	6,598	6,541	6,328	6,307	6,342	6,054
Unemployed	1,093	1,187	1,138	1,145	1,088	1,165	1,192	1,221	1,106	1,244	1,262	1,271	1,252	1,215	1,255
Unemployment rate	13.1	14.7	12.8	13.2	13.8	14.4	14.8	15.8	14.9	15.4	15.7	16.2	16.1	15.6	16.8
White															
Civilian noninstitutional population[1]	174,428	175,888	175,416	175,533	175,653	175,789	175,924	176,069	176,220	176,372	176,500	176,607	176,713	176,783	176,866
Civilian labor force	117,574	118,144	118,194	118,014	117,714	117,854	117,986	117,813	118,274	118,506	118,566	118,403	117,756	118,472	118,291
Participation rate	67.4	67.2	67.4	67.3	67.0	67.0	67.1	66.9	67.1	67.2	67.2	67.0	66.6	67.0	66.9
Employed	113,475	113,220	113,853	113,434	113,185	113,037	113,237	112,703	113,147	112,878	112,652	112,388	111,876	112,632	111,941
Employment-population ratio[2]	65.1	64.4	64.9	64.6	64.4	64.4	64.3	64.0	64.2	64.0	63.8	63.6	63.3	63.7	63.3
Unemployed	4,099	4,923	4,384	4,640	4,541	4,728	4,810	5,073	5,127	5,628	5,914	6,015	5,883	5,840	6,351
Unemployment rate	3.5	4.2	3.7	3.9	3.9	4.0	4.1	4.3	4.3	4.7	5.0	5.1	5.0	4.9	5.4
Black															
Civilian noninstitutional population[1]	25,218	25,559	25,441	25,472	25,501	25,533	25,565	25,604	25,644	25,686	25,720	25,752	25,785	25,813	25,839
Civilian labor force	16,603	16,719	16,750	16,678	16,644	16,739	16,685	16,720	16,827	16,748	16,687	16,833	16,769	16,747	16,716
Participation rate	65.8	65.4	65.8	65.5	65.3	65.6	65.3	65.3	65.6	65.2	64.9	65.4	65.0	64.9	64.7
Employed	15,334	15,270	15,341	15,304	15,311	15,330	15,337	15,210	15,339	15,144	15,040	15,122	15,119	15,131	14,895
Employment-population ratio[2]	60.8	59.7	60.3	60.1	60.0	60.0	60.0	59.4	59.8	59.0	58.5	58.7	58.6	58.6	57.8
Unemployed	1,269	1,450	1,409	1,374	1,333	1,409	1,348	1,510	1,488	1,604	1,647	1,711	1,650	1,616	1,821
Unemployment rate	7.6	8.7	8.4	8.2	8.0	8.4	8.1	9.0	8.8	9.6	9.9	10.2	9.8	9.6	10.9

See footnotes at end of table.

4. Continued—Employment status of the population, by sex, age, race, and Hispanic origin, monthly data seasonally adjusted

[Numbers in thousands]

Employment status	Annual average		2001										2002		
	2000	2001	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Hispanic origin															
Civilian noninstitutional population[1]	22,393	23,122	22,889	22,957	23,021	23,090	23,157	23,222	23,288	23,351	23,417	23,478	23,542	23,604	23,664
Civilian labor force	15,368	15,751	15,739	15,730	15,656	15,602	15,753	15,788	15,811	15,956	15,932	16,013	15,988	16,011	16,018
Participation rate	68.6	68.1	68.8	68.5	68.0	67.6	68.0	68.0	67.9	68.3	68.0	68.2	67.9	67.8	67.7
Employed	14,492	14,714	14,760	14,738	14,684	14,574	14,776	14,771	14,785	14,824	14,751	14,753	14,700	14,867	14,728
Employment-population ratio[2]	64.7	63.6	64.5	64.2	63.8	63.1	63.8	63.6	63.5	63.5	63.0	62.8	62.4	63.0	62.2
Unemployed	876	1,037	979	992	972	1,028	977	1,017	1,026	1,132	1,181	1,260	1,288	1,143	1,290
Unemployment rate	5.7	6.6	6.2	6.3	6.2	6.6	6.2	6.4	6.5	7.1	7.4	7.9	8.1	7.1	8.1

[1] The population figures are not seasonally adjusted.

[2] Civilian employment as a percent of the civilian noninstitutional population.

NOTE: Detail for the above race and Hispanic-origin groups will not sum to totals becausedata for the "other races" groups are not presented and Hispanics are included in both the white and black population groups.

5. Selected employment indicators, monthly data seasonally adjusted

[In thousands]

Selected categories	Annual average		2001										2002		
	2000	2001	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Characteristic															
Employed, 16 years and over	135,208	135,073	135,808	135,424	135,235	135,003	145,106	134,408	135,004	134,615	134,253	134,055	133,468	134,319	133,433
Men	72,293	72,080	72,271	72,272	72,131	72,012	72,093	71,705	72,177	71,871	71,570	71,577	71,114	71,457	70,660
Women	62,915	62,992	63,537	63,152	63,104	62,991	63,013	62,703	62,827	62,744	62,683	62,478	62,354	62,862	62,773
Married men, spouse present	43,368	43,243	43,385	43,459	43,633	43,357	43,264	43,143	43,099	42,983	42,861	42,772	42,823	43,275	43,057
Married women, spouse present	33,708	33,613	34,007	33,699	33,692	33,466	33,571	33,685	33,604	33,227	33,330	33,209	33,174	33,703	33,787
Women who maintain families	8,387	8,364	8,144	2,179	8,335	2,513	1,558	8,328	8,274	8,256	8,331	8,458	8,396	8,417	8,279
Class of worker															
Agriculture:															
Wage and salary workers	2,034	1,884	1,909	1,899	1,957	1,803	1,798	1,852	1,882	1,898	1,865	1,879	1,917	1,930	1,650
Self-employed workers	1,233	1,233	1,224	1,220	1,208	1,193	'152	1,239	1,278	1,290	1,276	1,313	1,311	1,293	1,205
Unpaid family workers	38	27	34	44	34	32	23	29	24	26	12	27	49	21	27
Nonagricultural industries:															
Wage and salary workers	123,128	123,235	123,767	123,406	123,530	123,069	123,204	122,885	123,186	122,710	122,507	122,196	122,145	122,770	122,331
Government	19,053	19,127	19,089	18,928	19,068	18,934	18,999	19,150	19,290	19,223	19,172	19,183	19,047	19,286	19,506
Private industries	104,076	104,108	104,678	104,478	10,442	104,135	104,205	103,535	103,896	103,487	103,336	103,013	103,098	103,485	102,825
Private households	890	803	858	809	795	760	790	814	804	867	790	736	725	709	729
Other	103,186	103,305	103,820	103,669	103,667	103,375	103,415	102,721	103,092	102,620	102,545	102,277	102,373	102,775	102,096
Self-employed workers	8,674	8,594	8,749	8,597	8,540	8,720	8,568	8,503	8,556	8,505	8,507	8,524	8,213	8,257	8,118
Unpaid family workers	101	101	128	99	111	102	98	111	101	95	77	92	97	86	102
Persons at work part time[1]															
All industries:															
Part time for economic reasons	3,190	3,672	3,221	3,277	3,388	3,649	3,571	3,389	4,148	4,329	4,206	4,267	3,973	4,228	4,129
Slack work or business conditions	1,927	2,356	1,965	2,188	2,205	2,278	2,174	2,115	2,796	2,983	2,796	2,809	2,549	2,755	2,810
Could only find part-time work	944	1,007	916	895	921	1,008	1,011	952	1,064	1,108	1,121	1,101	1,089	1,120	1,068
Part time for noneconomic reasons	18,722	18,707	18,711	18,698	18,634	18,482	18,812	19,011	18,798	18,644	18,587	18,540	18,201	18,395	19,271
Nonagricultural industries:															
Part time for economic reasons	3,045	3,529	3,084	3,120	3,231	3,556	3,425	32,348	4,015	4,222	4,017	4,119	3,781	3,998	3,982
Slack work or business conditions	1,835	2,266	1,[illegible]89	2,011	2,101	2,215	2,111	2,025	2,704	2,898	2,679	2,717	2,448	2,615	2,714
Could only find part-time work	924	989	891	883	899	990	993	927	1,045	1,082	1,098	1,138	1,068	1,089	1,052
Part time for noneconomic reasons	18,185	18,177	18,182	18,166	18,097	18,[illegible]68	18,283	18,485	18,232	18,065	18,007	17,960	17,717	17,886	18,796

[1] Excludes persons "with a job but not at work" during the survey period for such reasons as vacation, illness, or industrial disputes.

6. Selected unemployment indicators, monthly data seasonally adjusted

[Unemployment rates]

Selected categories	Annual average		2001										2002		
	2000	2001	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Characteristic															
Total, 16 years and over	4.0	4.8	4.3	4.5	4.4	4.6	4.6	4.9	5.0	5.4	5.6	5.8	5.6	5.5	6.1
Both sexes, 16 to 19 years	13.1	14.7	13.8	14.2	13.6	14.4	14.8	15.8	14.9	15.4	15.7	16.2	16.1	16.6	16.8
Men, 20 years and over	3.3	4.2	3.8	3.9	3.9	4.1	4.0	4.4	4.3	4.8	5.2	5.2	5.2	5.0	5.9
Women, 20 years and over	3.6	4.1	3.6	3.8	3.8	3.9	4.0	4.2	4.4	4.8	4.9	5.2	4.8	5.0	5.0
White, total	3.5	4.2	3.7	3.9	3.9	4.0	4.1	4.3	4.3	4.7	5.0	5.1	5.0	4.9	5.4
Both sexes, 16 to 19 years	11.4	12.7	11.7	11.9	12.0	12.7	13.2	13.8	12.7	23.1	13.5	13.7	14.2	14.0	14.6
Men, 16 to 19 years	12.3	13.8	12.3	12.9	13.3	14.3	13.8	15.1	13.6	14.7	15.8	14.6	13.7	15.4	16.5
Women, 16 to 19 years	10.4	11.4	11.0	10.9	10.7	11.0	12.5	12.4	11.7	11.5	11.1	12.8	14.6	12.6	12.7
Men, 20 years and over	2.8	3.7	3.3	3.4	3.4	3.6	3.5	3.8	3.8	4.4	4.7	4.6	4.7	4.4	5.3
Women, 20 years and over	3.1	3.6	3.1	3.4	3.4	3.4	3.5	3.6	3.8	4.1	4.2	4.5	4.2	4.4	4.3
Black, total	7.6	8.7	8.4	8.2	8.0	8.4	8.1	9.0	8.8	9.6	9.9	10.2	9.8	9.6	10.9
Both sexes, 16 to 19 years	24.7	29.0	28.3	30.5	25.7	28.0	26.6	30.1	28.5	30.2	32.1	33.4	30.7	27.9	33.6
Men, 16 to 19 years	26.4	30.5	28.7	33.5	20.6	29.1	28.1	31.4	30.8	31.2	31.6	32.0	32.1	30.0	35.8
Women, 16 to 19 years	23.0	27.5	28.0	27.7	21.5	25.7	25.2	28.7	26.1	29.1	32.6	34.8	29.0	25.6	31.1
Men, 20 years and over	7.0	8.0	8.2	8.1	7.6	7.8	7.9	8.8	7.8	8.2	8.7	9.1	8.9	8.7	10.5
Women, 20 years and over	6.3	7.0	6.3	5.9	6.4	6.7	6.2	7.0	7.7	8.5	8.4	8.7	8.4	8.5	9.0
Hispanic origin, total	5.7	6.6	6.2	6.3	6.2	6.6	6.2	6.4	6.5	7.1	7.4	7.9	8.1	7.1	8.1
Married men, spouse present	2.0	2.7	2.4	2.5	2.6	2.6	2.7	2.8	2.8	3.1	3.3	3.4	3.5	3.4	4.0
Married women, spouse present	2.7	3.1	2.7	2.8	2.9	3.0	2.9	3.1	3.3	3.6	3.6	3.7	3.4	3.8	3.7
Women who maintain families	5.9	6.6	6.1	6.3	6.2	6.3	6.3	6.8	7.1	6.8	8.0	8.0	8.9	8.0	7.9
Full-time workers	3.9	4.7	4.1	4.3	4.3	4.5	4.5	4.8	5.0	5.4	5.6	5.8	5.7	5.7	6.3
Part-time workers	4.8	5.1	4.9	5.3	4.8	5.2	5.1	5.4	4.6	5.5	5.6	5.6	5.2	4.8	5.4
Industry															
Nonagricultural wage and salary workers	4.1	5.1	4.5	4.6	4.6	4.8	4.8	5.2	5.2	5.8	6.0	6.2	5.9	6.0	6.5
Mining	3.9	4.7	4.0	4.8	4.9	5.9	3.9	4.7	5.0	5.8	5.3	6.1	5.9	4.5	6.4
Construction	6.4	7.3	6.4	6.9	6.7	6.9	7.1	7.6	7.8	8.3	8.9	8.9	9.4	7.9	11.9
Manufacturing	3.6	5.2	4.8	4.6	4.8	5.0	5.2	5.7	5.6	6.0	6.4	6.8	6.6	6.7	7.3
Durable goods	3.4	5.3	4.7	4.4	4.8	5.0	5.0	5.8	5.8	6.5	6.9	7.2	7.0	7.5	7.5
Nondurable goods	4.0	5.1	4.9	4.9	4.8	4.9	5.5	5.4	5.4	5.3	5.5	6.1	5.9	5.5	6.9
Transportation and public utilities	3.1	4.1	3.2	4.0	3.6	4.1	3.4	3.6	3.9	6.0	6.1	6.1	6.2	5.8	5.7
Wholesale and retail trade	5.0	5.6	5.3	5.2	5.2	5.4	5.3	5.6	5.9	6.1	6.4	7.1	6.3	6.5	7.2
Finance, insurance, and real estate	2.3	2.8	2.5	2.6	2.4	2.6	3.1	2.7	2.8	2.8	3.6	3.0	2.2	2.8	3.0
Services	3.8	4.6	4.1	4.1	4.2	4.4	4.4	4.9	4.8	5.5	5.4	5.5	5.4	5.5	5.5
Government workers	2.1	2.2	2.1	2.2	2.0	2.1	2.1	2.1	2.2	2.3	2.4	2.4	2.3	2.7	2.3
Agricultural wage and salary workers	7.5	9.7	11.1	9.4	8.4	9.5	10.5	10.0	7.6	9.0	9.3	9.6	10.3	9.5	16.8
Educational attainment[1]															
Less than a high school diploma	6.4	7.3	6.8	6.7	6.7	6.9	6.8	7.3	7.7	7.8	8.1	8.8	8.1	8.3	9.4
High school graduates, no college	3.5	4.2	3.8	3.8	3.9	3.9	4.1	4.3	4.3	4.6	5.0	4.9	5.2	5.3	5.9
Some college, less than a bachelor's degree	2.7	3.3	2.7	2.9	3.0	3.1	3.1	3.3	3.5	3.9	4.2	4.3	4.2	4.3	4.5
College graduates	1.7	2.3	1.9	2.2	2.1	2.1	22.2	2.2	2.5	2.7	2.9	3.1	2.9	2.9	2.7

[1] Data refer to persons 25 years and over.

7. Duration of unemployment, monthly data seasonally adjusted

[Numbers in thousands]

Weeks of unemployment	Annual average		2001										2002		
	2000	2001	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Less than 5 weeks	2,543	2,833	2,898	2,822	2,714	2,809	2,647	2,955	2,807	3,084	3,090	3,024	2,978	2,828	2,798
5 to 14 weeks	1,803	2,163	1,967	1,976	2,021	2,098	2,170	2,152	2,366	2,522	2,573	2,724	2,586	2,515	2,794
15 weeks and over	1,309	1,746	1,510	1,507	1,503	1,571	1,630	1,798	1,907	2,042	2,317	2,410	2,546	2,561	3,067
15 to 26 weeks	665	949	814	781	862	843	948	980	1,084	1,136	1,207	1,295	1,418	1,383	1,684
27 weeks and over	644	787	696	726	641	728	682	818	823	906	1,110	1,115	1,127	1,178	1,383
Mean duration, in weeks	12.6	13.2	12.8	12.6	12.4	12.9	12.7	13.2	13.3	13.0	14.4	14.5	14.8	15.0	16.2
Median duration, in weeks	5.9	6.8	6.4	6.0	6.4	6.3	6.7	6.8	7.3	7.4	7.6	8.2	8.8	8.1	9.7

8. Unemployed persons by reason for unemployment, monthly data seasonally adjusted

[Numbers in thousands]

Reason for unemployment	Annual average		2001										2002		
	2000	2001	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Job losers[1]	2,492	3,428	2,995	3,020	3,132	3,249	3,294	3,438	3,595	4,297	4,501	4,492	4,354	4,326	4,766
On temporary layoff	842	1,044	988	1,023	1,055	990	1,020	1,071	1,114	1,288	1,157	1,107	1,124	1,106	1,301
Not on temporary layoff	1,650	2,379	2,007	1,997	2,077	2,259	2,274	2,367	2,481	3,009	3,344	3,385	3,231	3,220	3,464
Job leavers	775	832	803	776	818	807	791	877	819	880	848	908	879	877	907
Reentrants	1,957	2,029	1,908	1,991	1,827	1,921	1,948	2,162	2,102	2,113	2,197	2,361	2,191	2,268	2,508
New entrants	431	453	410	456	467	470	442	488	466	466	497	495	479	485	479
Percent of unemployed															
Job losers[1]	44.1	50.8	49.0	48.4	50.2	50.4	50.9	49.4	51.5	55.4	56.0	54.4	55.1	54.4	55.0
On temporary layoff	14.9	15.6	16.2	16.4	16.9	15.4	15.8	15.4	16.0	16.6	14.4	13.4	14.2	13.9	15.0
Not on temporary layoff	29.2	35.3	32.8	32.0	33.3	35.0	35.1	34.0	35.5	38.8	41.6	41.0	40.9	40.5	40.0
Job leavers	13.7	12.3	13.1	12.4	13.1	12.5	12.2	12.6	11.7	11.3	10.5	11.0	11.1	11.0	10.5
Reentrants	34.6	30.1	31.2	31.9	29.3	29.8	30.1	31.0	30.1	27.2	27.3	28.6	27.7	28.5	29.0
New entrants	7.6	6.7	6.7	7.3	7.5	7.3	6.8	7.0	6.7	6.0	6.2	6.0	6.1	6.1	5.5
Percent of civilian labor force															
Job losers[1]	1.8	2.4	2.1	2.1	2.2	2.3	2.3	2.4	2.5	3.0	3.2	3.2	3.1	3.0	3.4
Job leavers	.6	.6	.6	.5	.6	.6	.6	.6	.6	.6	.6	.6	.6	.6	.6
Reentrants	1.4	1.4	1.3	1.4	1.3	1.4	1.4	1.5	1.5	1.5	1.5	1.7	1.5	1.6	1.8
New entrants	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3

[1] Includes persons who completed temporary jobs.

9. Unemployment rates by sex and age, monthly data seasonally adjusted

[Civilian workers]

Sex and age	Annual average		2001										2002	
	2000	2001	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
Total, 16 years and over	4.0	4.8	4.3	4.5	4.4	4.5	4.6	4.9	5.0	5.4	5.6	5.8	5.6	5.5
16 to 24 years	9.3	10.6	9.9	10.3	10.0	10.4	10.2	11.3	10.8	11.5	11.7	11.9	11.9	11.6
16 to 19 years	13.1	14.7	13.8	14.2	13.8	14.4	14.8	15.8	14.9	15.4	15.7	16.2	16.1	15.6
16 to 17 years	15.4	17.1	5.9	16.7	15.8	16.5	19.0	18.6	16.6	17.4	17.5	18.8	17.0	16.5
18 to 19 years	11.5	13.2	12.2	12.6	12.5	13.0	12.4	14.4	13.9	14.2	14.8	14.8	15.2	14.7
20 to 24 years	7.1	8.3	7.7	8.2	7.9	8.2	7.7	8.9	8.6	9.3	9.5	9.6	9.7	9.5
25 years and over	3.0	3.7	3.2	3.4	3.4	3.5	3.5	3.8	3.8	4.2	4.4	4.5	4.4	4.5
25 to 54 years	3.1	3.8	3.3	3.4	3.5	3.6	3.7	3.9	3.9	4.4	4.6	4.7	4.7	4.6
55 years and over	2.6	3.0	2.7	2.7	2.6	2.8	2.9	3.1	3.2	3.4	3.5	4.0	3.5	3.8
Men, 16 years and over	3.9	4.8	4.4	4.6	4.5	4.7	4.7	5.1	5.0	5.5	5.9	5.8	5.8	5.6
16 to 24 years	9.7	11.4	10.9	10.9	11.0	11.6	10.7	12.3	1.5	12.4	13.0	12.8	12.5	12.4
16 to 19 years	14.0	15.9	14.3	15.1	15.4	15.8	15.6	17.4	16.0	17.2	17.7	17.2	16.3	16.8
16 to 17 years	16.8	18.8	16.2	18.7	17.9	18.5	19.1	21.9	18.7	20.3	20.4	20.0	17.6	19.6
18 to 19 years	12.2	14.1	12.7	12.9	13.9	14.2	13.4	15.0	14.5	15.1	16.2	15.6	15.1	15.4
20 to 24 years	7.3	8.9	8.9	8.6	8.7	9.3	8.1	9.5	9.1	9.8	10.5	10.5	10.6	10.2
25 years and over	2.8	3.6	3.2	3.4	3.3	3.4	3.6	3.8	3.7	4.2	4.5	4.5	4.5	4.4
25 to 54 years	2.9	3.7	3.2	3.5	3.4	3.5	3.6	3.9	3.8	4.3	4.6	4.5	4.7	4.5
55 years and over	2.7	3.3	3.0	2.9	2.9	3.0	3.1	3.3	3.3	3.7	4.1	4.2	3.8	4.1
Women, 16 years and over	4.1	4.7	4.2	4.3	4.3	4.4	4.6	4.8	5.0	5.3	5.4	5.8	5.4	5.5
16 to 24 years	8.9	9.7	8.9	9.7	8.8	9.2	9.7	10.3	10.1	10.5	10.3	11.0	11.3	10.7
16 to 19 years	12.1	13.4	13.3	13.2	12.1	13.0	14.0	14.1	13.6	13.6	13.7	15.1	15.8	14.3
16 to 17 years	14.0	15.3	15.6	14.5	13.8	14.4	18.8	15.4	14.3	14.5	14.5	17.6	16.4	13.6
18 to 19 years	10.8	12.2	11.6	12.2	11.0	11.8	11.3	13.7	13.3	13.3	13.3	14.0	15.2	13.9
20 to 24 years	7.0	7.5	6.4	7.8	7.0	7.0	7.3	8.2	8.1	8.7	8.3	8.7	8.7	8.7
25 years and over	3.2	3.7	3.2	3.3	3.4	3.5	3.5	3.8	4.0	4.2	4.4	4.6	4.3	4.6
25 to 54 years	3.3	3.8	3.4	3.4	3.6	3.7	3.7	3.9	4.0	4.4	4.7	4.8	4.6	4.7
55 years and over	2.6	2.7	2.3	2.5	2.4	2.6	2.6	2.8	3.2	3.2	2.8	3.7	3.0	3.5

10. Unemployment rates by State, seasonally adjusted

State	Feb. 2001	Jan. 2002[p]	Feb. 2002[p]	State	Feb. 2001	Jan. 2002[p]	Feb. 2002[p]
Alabama	4.9	5.3	5.5	Missouri	4.6	4.7	4.8
Alaska	6.4	5.9	5.7	Montana	4.5	4.2	4.4
Arizona	4.0	5.8	6.0	Nebraska	3.0	3.4	3.4
Arkansas	4.9	4.8	4.9	Nevada	4.6	6.3	6.1
California	4.7	6.4	6.2	New Hampshire	3.0	4.0	4.0
Colorado	2.9	5.6	5.7	New Jersey	3.5	4.9	5.2
Connecticut	2.5	3.5	3.5	New Mexico	4.6	6.1	6.2
Delaware	3.9	3.8	3.5	New York	4.3	5.8	5.9
District of Columbia	6.4	6.7	7.0	North Carolina	4.7	6.4	6.3
Florida	4.0	5.3	5.5	North Dakota	2.9	3.0	2.9
Georgia	3.7	4.6	4.5	Ohio	3.9	5.1	5.4
Hawaii	4.2	4.7	4.7	Oklahoma	3.4	4.2	4.2
Idaho	4.7	5.5	5.5	Oregon	5.2	8.1	8.1
Illinois	5.0	5.9	5.8	Pennsylvania	4.5	5.6	5.5
Indiana	3.7	5.0	5.1	Rhode Island	4.4	5.0	4.2
Iowa	3.1	3.3	3.4	South Carolina	4.7	5.4	5.6
Kansas	4.3	4.4	4.4	South Dakota	2.8	3.2	3.2
Kentucky	4.9	5.4	5.2	Tennessee	4.2	5.4	5.4
Louisiana	5.8	5.9	5.9	Texas	4.1	5.7	5.8
Maine	3.5	3.8	3.9	Utah	3.8	5.2	5.5
Maryland	3.8	4.7	4.6	Vermont	3.2	3.6	3.5
Massachusetts	2.9	4.4	4.4	Virginia	2.6	4.2	4.1
Michigan	4.6	6.5	5.7	Washington	5.8	7.6	7.0
Minnesota	3.5	4.1	4.2	West Virginia	5.1	5.2	5.6
Mississippi	5.1	6.5	6.4	Wisconsin	4.4	5.2	5.8
				Wyoming	3.6	3.9	3.6

[p] = preliminary

11. Employment of workers on nonfarm payrolls by State, seasonally adjusted

[In thousands]

State	Feb. 2001	Jan. 2002	Feb. 2002[p]	State	Feb. 2001	Jan. 2002	Feb. 2002[p]
Alabama	1,923.3	1,900.5	1,900.4	Missouri	2,751.3	2,706.9	2,699.2
Alaska	288.1	290.5	292.8	Montana	391.2	395.1	394.5
Arizona	2,272.3	2,249.2	2,242.5	Nebraska	908.5	908.5	909.2
Arkansas	1,159.8	1,154.1	1,154.2	Nevada	1,053.2	1,055.0	1,060.5
California	14,717.5	14,671.7	14,664.6	New Hampshire	632.0	628.4	626.9
Colorado	2,245.6	2,203.0	2,194.9	New Jersey	4,028.8	4,025.0	4,016.7
Connecticut	1,691.3	1,676.8	1,675.8	New Mexico	754.0	760.9	762.6
Delaware	420.1	414.6	416.0	New York	8,681.1	8,559.0	8,547.9
District of Columbia	650.4	649.4	649.4	North Carolina	3,940.8	3,885.3	3,880.6
Florida	7,182.0	7,176.9	7,174.2	North Dakota	329.7	331.2	330.7
Georgia	3,987.8	3,876.0	3,880.7	Ohio	5,601.3	5,547.7	5,543.5
Hawaii	557.0	548.1	547.3	Oklahoma	1,503.7	1,509.6	1,510.4
Idaho	568.7	567.8	569.3	Oregon	1,614.1	1,577.7	1,577.6
Illinois	6,040.6	5,966.7	5,939.3	Pennsylvania	5,720.5	5,655.5	5,658.3
Indiana	2,955.9	2,915.2	2,907.6	Rhode Island	479.4	480.1	479.7
Iowa	1,475.6	1,463.9	1,464.4	South Carolina	1,840.3	1,829.4	1,830.0
Kansas	1,353.0	1,359.9	1,358.7	South Dakota	379.9	376.0	376.1
Kentucky	1,829.3	1,828.1	1,828.0	Tennessee	2,727.6	2,720.1	2,719.1
Louisiana	1,923.6	1,933.2	1,929.0	Texas	9,546.2	9,452.5	9,455.5
Maine	609.1	609.4	609.0	Utah	1,084.8	1,086.0	1,079.9
Maryland	2,470.1	2,459.2	2,456.3	Vermont	301.4	297.1	296.5
Massachusetts	3,360.4	3,306.6	3,305.7	Virginia	3,550.4	3,508.3	3,493.8
Michigan	4,625.6	4,557.7	4,557.2	Washington	2,719.3	2,665.4	2,659.4
Minnesota	2,700.2	2,659.6	2,659.3	West Virginia	739.7	733.4	736.8
Mississippi	1,139.8	1,130.4	1,131.2	Wisconsin	2,841.4	2,814.0	2,813.8
				Wyoming	243.6	246.5	248.0

[p] = preliminary. Dash indicates data not available.

NOTE: Some data in this table may differ from data published elsewhere because of the continual updating of the data base.

12. Employment of workers on nonfarm payrolls by industry, monthly data seasonally adjusted

[In thousands]

Industry	Annual average		2001										2002		
	2000	2001	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.[p]	Mar.[p]
TOTAL	131,739	132,212	132,654	132,489	132,530	132,431	132,449	132,385	132,230	131,782	131,427	131,321	131,212	131,210	131,266
PRIVATE SECTOR	111,079	111,339	111,943	111,742	111,760	111,603	111,517	111,390	111,249	110,784	110,421	110,260	110,142	110,125	110,146
GOODS-PRODUCING	25,709	25,121	25,602	25,421	25,324	25,186	25,122	24,963	24,888	24,746	24,577	24,453	24,273	24,243	24,186
Mining	543	563	557	560	564	565	567	569	569	569	567	564	563	557	555
Metal mining	41	38	38	37	37	35	34	35	35	35	34	33	31	30	30
Oil and gas extraction	311	337	331	335	339	340	341	342	342	340	339	336	339	335	332
Nonmetallic minerals, except fuels	114	113	113	113	112	112	113	112	112	113	113	113	111	111	112
Construction	6,698	5,861	6,929	6,852	6,881	6,864	6,867	6,881	6,871	6,852	6,851	6,850	6,787	6,817	6,780
General building contractors	1,528	1,554	1,552	1,548	1,556	1,551	1,554	1,557	1,562	1,560	1,561	1,559	1,552	1,551	1,547
Heavy construction, except building	901	629	938	915	923	925	935	932	932	933	942	944	928	939	903
Special trades contractors	4,269	4,378	4,439	4,389	4,402	4,388	4,378	4,372	4,377	4,359	4,348	4,348	4,307	4,327	4,330
Manufacturing	18,469	17,698	18,116	18,009	17,879	17,757	17,688	17,533	17,448	17,325	17,159	17,039	16,923	16,869	16,831
Production workers	12,628	11,922	12,254	12,166	12,086	11,958	11,900	11,782	11,708	11,626	11,500	11,405	11,328	11,293	11,272
Durable goods	11,138	10,638	10,941	10,870	10,778	10,692	10,624	10,523	10,460	10,363	10,240	10,158	10,048	10,018	9,987
Production workers	7,591	7,122	7,358	7,308	7,235	7,157	7,102	7,022	6,970	6,897	6,805	6,744	6,675	6,653	6,639
Lumber and wood products	832	795	799	800	797	798	797	793	794	789	784	780	781	785	786
Furniture and fixtures	556	527	548	543	540	532	531	519	513	505	499	499	497	499	497
Stone, clay, and glass products	579	571	578	577	574	572	569	568	567	566	562	559	554	550	552
Primary metal industries	698	651	671	667	660	654	648	643	638	633	619	613	600	597	589
Fabricated metal products	1,537	1,479	1,509	1,503	1,488	1,478	1,478	1,468	1,464	1,454	1,435	1,428	1,418	1,417	1,414
Industrial machinery and equipment	2,120	2,014	2,084	2,072	2,054	2,031	2,007	1,980	1,965	1,943	1,917	1,892	1,870	1,857	1,850
Computer and office equipment	361	355	369	367	366	357	353	348	344	342	339	335	327	326	326
Electronic and other electrical equipment	1,719	1,612	1,715	1,684	1,656	1,624	1,589	1,565	1,551	1,529	1,499	1,474	1,456	1,434	1,424
Electronic components and accessories	682	647	702	686	670	650	634	618	613	601	591	583	571	562	556
Transportation equipment	1,849	1,747	1,775	1,768	1,757	1,749	1,752	1,750	1,735	1,714	1,706	1,696	1,661	1,669	1,657
Motor vehicles and equipment	1,013	933	956	950	939	931	936	931	919	903	903	901	878	894	896
Aircraft and parts	465	463	465	464	465	465	466	465	465	463	456	452	440	432	423
Instruments and related products	852	859	871	866	865	865	865	858	851	849	843	839	835	833	831
Miscellaneous manufacturing industries	394	385	391	390	387	389	388	379	382	381	376	378	379	377	377
Nondurable goods	7,331	7,059	7,175	7,139	7,101	7,065	7,064	7,010	6,988	6,962	6,919	6,881	6,875	6,851	6,844
Production workers	5,038	4,800	4,896	4,858	4,831	4,799	4,798	4,760	4,738	4,729	4,695	4,661	4,653	4,640	4,633
Food and kindred products	1,684	1,685	1,687	1,687	1,684	1,685	1,680	1,674	1,682	1,689	1,691	1,682	1,684	1,686	1,683
Tobacco products	34	33	32	32	33	33	33	35	33	33	33	32	33	33	34
Textile mill products	528	473	494	489	480	472	471	465	459	454	446	442	440	439	437
Apparel and other textile products	633	565	590	581	579	567	571	554	551	542	533	531	534	527	527
Paper and allied products	657	635	642	641	639	635	632	628	679	628	627	624	624	622	622
Printing and publishing	1,547	1,492	1,524	1,512	1,502	1,495	1,489	1,483	1,473	1,465	1,452	1,444	1,434	1,424	1,419
Chemicals and allied products	1,038	1,033	1,039	1,036	1,033	1,033	1,039	1,035	1,031	1,027	1,024	1,021	1,020	1,019	1,015
Petroleum and coal products	127	127	126	126	127	128	128	127	128	126	127	127	129	127	128
Rubber and miscellaneous plastics products	1,011	954 64	973	967	959	953	957	947	941	935	927	920	919	916	120
Leather and leather products	71	64	68	66	65	64	64	62	61	60	59	58	59	58	59
SERVICE-PRODUCING	106,050	107,091	107,052	107,068	107,206	107,245	107,327	107,432	107,342	107,036	106,850	106,868	106,939	106,967	107,102
Transportation and public utilities	7,019	7,070	7,127	7,119	7,130	7,118	7,108	7,082	7,070	7,018	6,952	6,915	6,898	6,898	6,892
Transportation	4,529	4,531	4,591	4,576	4,584	4,571	4,561	4,539	4,528	4,472	4,414	4,387	4,381	4,384	4,379
Railroad transportation	236	227	230	230	230	227	226	226	226	225	224	227	226	226	227
Local and interurban passenger transit	476	481	480	477	483	483	485	486	482	479	480	485	482	484	485
Trucking and warehousing	1,856	1,854	1,872	1,864	1,867	1,867	1,863	1,844	1,838	1,832	1,830	1,832	1,830	1,818	1,829
Water transportation	198	203	201	202	203	201	203	203	206	206	204	206	204	205	205
Transportation by air	1,281	1,288	1,316	1,313	1,315	1,310	1,304	1,303	1,300	1,264	1,221	1,189	1,182	1,185	1,189
Pipelines, except natural gas	14	14	13	14	14	14	14	14	14	14	14	14	14	14	14
Transportation services	471	464	479	476	472	469	466	463	463	452	441	434	431	430	430
Communications and public utilities	2,490	2,540	2,536	2,543	2,546	2,547	2,547	2,543	2,542	2,544	2,538	2,528	2,517	2,514	2,513
Communications	1,639	1,692	1,690	1,696	1,699	1,700	1,700	1,695	1,695	1,695	1,689	1,683	1,670	1,668	1,669
Electric, gas, and sanitary services	851	847	846	847	847	847	847	848	847	849	849	845	847	846	844
Wholesale trade	7,024	7,014	7,066	7,053	7,038	7,022	7,017	7,010	6,988	6,971	6,941	6,938	6,933	6,919	6,917
Retail trade	23,307	23,488	23,457	23,530	23,546	23,561	23,606	23,583	23,536	23,422	23,424	23,365	23,438	23,458	23,452
Building materials and garden supplies	1,016	1,010	1,006	999	1,006	1,014	1,008	1,014	1,013	1,012	1,010	1,013	1,022	1,029	1,030
General merchandise stores	2,837	2,792	2,797	2,804	2,821	2,818	2,810	2,800	2,793	2,784	2,778	2,755	2,710	2,789	2,786
Department stores	2,491	2,447	2,451	2,459	2,473	2,471	2,458	2,449	2,450	2,422	2,420	2,410	2,389	2,430	2,439

See footnotes at end of table.

12. Continued—Employment of workers on nonfarm payrolls by industry, monthly data seasonally adjusted

[In thousands]

Industry	Annual average		2001										2002		
	2000	2001	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.^{p}	Mar.^{p}
Food stores	3,521	3,542	3,550	3,562	3,553	3,544	3,536	3,531	3,538	3,542	3,539	3,525	3,519	3,502	3,493
Automotive dealers and service stations	2,412	2,429	2,420	2,421	2,428	2,431	2,435	2,441	2,435	2,429	2,430	2,428	2,436	2,430	2,432
New and used car dealers	1,114	1,130	1,124	1,122	1,126	1,128	1,131	1,133	1,133	1,134	1,137	1,141	1,145	1,147	1,149
Apparel and accessory stores	1,193	1,219	1,228	1,226	1,231	1,227	1,219	1,224	1,224	1,208	1,203	1,182	1,221	1,217	1,221
Furniture and home furnishings stores	1,134	1,140	1,147	1,140	1,136	1,136	1,137	1,137	1,138	1,136	1,136	1,143	1,138	1,141	1,141
Eating and drinking places	8,114	8,215	8,158	8,213	8,216	8,241	8,310	8,280	8,242	8,167	8,196	8,209	8,213	8,203	8,199
Miscellaneous retail establishments	3,080	3,142	3,151	3,165	3,155	3,150	3,151	3,156	3,153	3,144	3,130	3,100	3,149	3,147	3,150
Finance, insurance, and real estate	7,560	7,623	7,618	7,626	7,644	7,631	7,616	7,623	7,633	7,634	7,638	7,632	7,638	7,624	7,618
Finance	3,710	3,759	3,755	3,761	3,770	3,787	3,755	3,758	3,758	3,761	3,772	3,774	3,778	3,768	3,766
Depository institutions	2,029	2,036	2,028	2,032	2,037	2,041	2,039	2,037	2,039	2,041	2,045	2,044	2,046	2,043	2,045
Commercial banks	1,430	1,423	1,418	1,421	1,426	1,428	1,426	1,423	1,423	1,427	1,426	1,427	1,429	1,426	1,427
Savings institutions	253	256	254	255	255	256	255	255	256	257	259	260	262	261	262
Nondepository institutions	681	701	686	691	697	699	703	709	706	712	717	729	742	737	739
Security and commodity brokers	748	763	781	780	776	766	756	755	755	750	751	744	742	737	739
Holding and other investment offices	251	259	260	258	260	261	258	257	258	258	259	258	259	257	254
Insurance	2,346	2,355	2,353	2,357	2,358	2,356	2,357	2,357	2,362	2,361	2,356	2,352	2,351	2,346	2,342
Insurance carriers	1,589	1,596	1,593	1,598	1,598	1,598	1,599	1,598	1,601	1,602	1,597	1,594	1,594	1,588	1,586
Insurance agents, brokers, and service	757	759	760	760	760	758	758	759	761	759	759	758	757	758	756
Real estate	1,504	1,510	1,510	1,509	1,516	1,508	1,506	1,508	1,513	1,512	1,510	1,506	1,509	1,510	1,510
Services[1]	40,460	41,023	41,073	40,993	41,078	41,085	41,046	41,129	41,134	40,995	40,889	40,957	40,992	40,983	41,101
Agricultural services	832	801	828	824	834	833	834	837	838	841	840	846	843	843	846
Hotels and other lodging places	1,914	1,912	1,960	1,944	1,935	1,920	1,922	1,912	1,913	1,862	1,852	1,845	1,854	1,859	1,863
Personal services	1,251	1,275	1,265	1,267	1,277	1,279	1,281	1,284	1,284	1,281	1,271	1,294	1,295	1,285	1,293
Business services	9,858	9,627	9,822	9,729	9,702	9,686	9,592	9,588	9,581	9,457	9,356	9,346	9,317	9,285	9,365
Services to buildings	994	1,001	1,007	1,009	1,013	1,008	998	997	997	995	996	992	982	976	979
Personnel supply services	3,887	3,531	3,694	3,600	3,590	3,508	3,517	3,521	3,488	3,378	3,282	3,252	3,237	3,237	3,317
Help supply services	3,487	3,142	3,293	3,202	3,198	3,161	3,127	3,113	3,106	3,005	2,913	2,894	2,881	2,891	2,960
Computer and data processing services	2,095	2,193	2,195	2,199	2,200	2,205	2,202	2,194	2,200	2,201	2,189	2,189	2,186	2,184	2,183
Auto repair services and parking	1,249	1,302	1,298	1,300	1,309	1,303	1,312	1,307	1,306	1,298	1,305	1,304	1,308	1,308	1,305
Miscellaneous repair services	366	362	364	364	363	361	360	362	363	362	360	359	358	361	357
Motion pictures	594	592	605	601	587	602	595	589	586	582	584	580	589	581	576
Amusement and recreation services	1,728	1,771	1,775	1,764	1,787	1,768	1,772	1,777	1,766	1,781	1,762	1,777	1,772	1,758	1,746
Health services	10,197	10,497	10,259	10,280	10,296	10,329	10,354	10,384	10,408	10,431	10,458	10,483	10,504	10,529	10,561
Offices and clinics of medical doctors	1,924	1,979	1,962	1,967	1,973	1,981	1,983	1,980	1,992	1,993	2,000	2,007	2,007	2,016	2,023
Nursing and personal care facilities	1,795	1,822	1,811	1,816	1,814	1,821	1,823	1,825	1,830	1,834	1,837	1,842	1,848	1,847	1,853
Hospitals	3,990	4,095	4,055	4,062	4,071	4,088	4,098	4,114	4,124	4,135	4,149	4,158	4,167	4,175	4,185
Home health care services	643	650	648	646	645	648	647	653	655	655	657	659	663	661	663
Legal services	1,010	1,026	1,022	1,021	1,027	1,027	1,026	1,028	1,030	1,030	1,030	1,031	1,030	1,029	1,032
Educational services	2,325	2,420	2,384	2,388	2,431	2,426	2,432	2,452	2,446	2,438	7,439	2,457	2,472	2,486	2,482
Social services	2,903	305'	3,009	3,023	3,039	3,056	3,048	3,076	3,085	3,098	3,100	33,105	3,122	3,121	3,125
Child day care services	712	749	739	743	745	756	760	765	756	757	755	757	756	754	756
Residential care	806	843	831	835	842	845	847	848	851	854	855	853	860	860	863
Museums and botanical and zoological gardens	108	110	110	109	110	111	111	111	112	112	110	110	110	110	110
Membership organizations	2,475	2,498	2,489	2,489	2,496	2,501	2,493	2,503	2,509	2,505	2,505	2,506	2,504	2,505	2,508
Engineering and management services	3,419	3,525	3,510	3,517	3,512	3,529	3,540	3,544	3,533	3,538	3,543	3,541	3,542	3,551	3,563
Engineering and architectural services	1,017	1,060	1,052	1,053	1,057	1,059	1,064	1,067	1,067	1,069	1,065	1,063	1,064	1,061	1,067
Management and public relations	1,090	1,123	1,125	1,124	1,121	1,124	1,119	1,123	1,122	1,124	1,127	1,125	1,132	1,131	1,136
Government	20,681	20,873	20,711	20,747	20,770	20,828	20,932	21,005	20,981	20,998	21,008	21,061	21,070	21,085	21,122
Federal	2,777	2,616	2,613	2,615	2,612	2,621	2,626	2,622	2,627	2,625	2,607	2,615	2,607	2,605	2,603
Federal, except Postal Service	1,917	1,787	1,754	1,756	1,754	1,772	1,772	1,774	1,776	1,779	1,777	1,775	1,775	1,774	1,773
State	4,785	4,880	4,836	4,847	4,854	4,881	4,909	4,913	4,931	4,919	4,916	4,929	4,934	4,930	4,935
Education	2,032	2,088	2,055	2,065	2,066	2,089	2,117	2,122	2,129	2,107	2,109	2,112	2,120	2,118	2,124
Other State government	2,753	2,792	2,781	2,782	2,788	2,792	2,792	2,791	2,802	2,812	2,807	2,816	2,814	2,812	2,124
Local	13,119	13,377	13,262	13,285	13,304	13,326	13,397	13,470	13,423	13,454	13,683	13,518	13,529	13,550	13,564
Education	7,440	7,567	7,492	7,495	7,512	7,515	7,575	7,650	7,595	7,607	7,830	7,642	7,644	7,655	7,682
Other local government	5,679	5,810	5,770	5,790	5,792	5,811	5,822	5,820	5,828	5,847	5,853	5,876	5,885	5,895	5,902

[1] Includes other industries not shown separately.

^{p} = preliminary.

NOTE: See "Notes on the data" for a description of the most recent benchmark revision.

13. Average weekly hours of production or nonsupervisory workers on private nonfarm payrolls, by industry, monthly data seasonally adjusted

Industry	Annual average		2001										2002		
	2000	2001	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.^{p}	Mar.^{p}
PRIVATE SECTOR	34.5	34.2	34.3	34.2	34.2	34.2	34.2	34.0	34.1	34.0	34.1	34.1	33.6	33.9	33.9
GOODS-PRODUCING	41.0	40.3	40.5	40.6	40.5	40.4	40.5	40.3	40.2	40.0	40.0	40.1	39.9	39.8	40.2
MINING	43.1	43.4	43.8	44.0	43.9	43.3	43.3	43.4	43.5	43.1	43.2	43.1	42.3	42.7	42.8
MANUFACTURING	41.6	40.7	41.0	41.0	40.7	40.7	40.8	40.7	40.6	40.5	40.3	40.6	40.4	40.3	40.9
Overtime hours	4.6	3.9	4.1	3.9	3.9	3.9	4.0	4.1	3.9	3.8	3.7	3.8	3.7	3.7	4.0
Durable goods	42.1	41.0	41.3	41.3	41.0	40.9	41.2	41.1	40.9	40.7	40.4	40.9	40.8	40.7	41.2
Overtime hours	4.7	3.9	4.0	3.9	3.9	3.9	4.0	4.1	3.8	3.7	3.6	3.8	3.7	3.7	4.1
Lumber and wood products	41.0	40.3	40.3	40.1	40.6	40.4	41.1	40.9	41.1	40.6	40.5	40.7	39.7	39.8	40.7
Furniture and fixtures	40.0	38.9	39.1	39.3	38.6	38.4	39.7	39.7	38.8	38.3	38.4	38.9	39.8	39.8	40.5
Stone, clay, and glass products	43.1	43.6	43.7	43.2	43.9	44.0	44.0	43.9	44.0	43.9	43.8	43.6	43.2	43.2	43.4
Primary metal industries	44.9	43.6	43.4	44.3	43.5	43.9	44.1	43.7	43.7	43.2	42.6	43.9	43.6	43.3	44.2
Blast furnaces and basic steel products	46.0	44.5	44.4	45.4	44.6	45.1	44.7	44.6	45.5	44.0	43.3	43.8	43.9	43.7	44.8
Fabricated metal products	42.6	41.3	41.9	42.0	41.4	41.2	41.6	41.5	41.2	41.0	40.7	41.3	41.2	41.3	41.6
Industrial machinery and equipment	42.2	40.7	41.2	41.3	40.7	40.4	40.8	40.2	40.3	40.4	39.9	40.1	40.4	40.2	40.5
Electronic and other electrical equipment	41.1	39.4	40.1	39.8	39.1	39.3	38.9	39.1	39.1	39.0	38.8	39.3	38.5	38.5	39.2
Transportation equipment	43.4	41.9	42.0	42.4	42.4	41.9	42.2	42.8	41.5	41.3	41.3	41.8	42.3	42.0	42.5
Motor vehicles and equipment	44.4	42.7	42.3	43.3	43.6	43.0	43.0	44.6	42.3	41.9	42.2	43.1	43.5	43.3	43.9
Instruments and related products	41.3	40.6	41.0	41.0	41.0	40.8	40.8	40.4	41.1	40.7	40.3	40.5	40.4	40.3	40.7
Miscellaneous manufacturing	39.0	37.9	38.2	38.2	37.9	38.4	38.4	38.2	37.6	37.5	37.1	37.8	37.1	37.7	38.5
Nondurable goods	40.8	40.3	40.5	40.5	40.3	40.4	40.3	40.1	40.2	40.2	40.0	40.2	40.0	39.8	40.3
Overtime hours	4.4	4.0	4.1	3.9	4.0	3.9	4.0	4.1	4.1	4.1	3.9	4.0	3.8	3.8	4.0
Food and kindred products	41.7	41.1	41.2	41.3	41.1	41.2	40.9	41.1	41.0	41.1	40.8	40.9	40.7	40.0	40.6
Textile mill products	41.2	40.0	40.5	40.3	40.3	40.4	39.7	39.8	39.8	39.7	39.5	40.0	39.9	40.5	41.7
Apparel and other textile products	37.8	37.3	37.5	38.0	37.8	37.5	37.7	36.9	36.9	36.8	36.9	37.3	36.6	37.2	38.2
Paper and allied products	42.5	41.7	41.8	42.0	41.6	41.7	41.9	41.2	41.6	41.5	41.3	41.5	41.4	41.1	41.5
Printing and publishing	38.3	38.1	38.6	38.2	38.0	38.0	38.2	38.0	38.1	38.0	37.8	37.9	37.3	37.4	37.8
Chemicals and allied products	42.5	42.3	42.3	42.6	42.4	42.2	42.7	42.1	42.2	42.3	42.0	41.9	41.9	41.5	41.9
Rubber and miscellaneous plastics products	41.4	41.7	41.0	40.8	40.6	40.7	40.6	40.5	40.8	40.5	40.7	41.2	40.9	40.9	41.1
Leather and leather products	37.5	36.4	36.1	36.6	35.9	36.2	35.7	36.4	36.3	36.0	36.6	37.5	37.5	37.2	37.6
SERVICE-PRODUCING	32.8	32.7	32.8	32.7	32.7	32.8	32.6	32.6	32.6	32.6	32.6	32.7	32.2	32.5	32.5
TRANSPORTATION AND PUBLIC UTILITIES	38.6	38.1	38.3	38.1	38.1	38.1	37.8	37.8	37.6	37.8	38.8	38.0	37.4	37.4	37.7
WHOLESALE TRADE	38.5	38.2	38.3	38.2	38.2	38.3	38.2	38.3	38.3	38.1	38.2	38.3	37.9	38.1	38.1
RETAIL TRADE	28.9	28.8	28.8	28.8	28.8	28.7	28.6	28.6	28.7	28.7	28.8	28.9	29.0	28.6	28.6

^{p} = preliminary.

NOTE: See "Notes on the data" for a description of the most recent benchmark revision.

14. Average hourly earnings of production or nonsupervisory workers on private nonfarm payrolls, by industry, seasonally adjusted

Industry	Annual average		2001										2002		
	2000	2001	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.^p	Mar.^p
PRIVATE SECTOR (in current dollars)	$13.75	$14.33	$14.17	$14.21	$14.24	$14.31	$14.34	$14.40	$14.45	$14.47	$14.54	$14.59	$14.67	$14.68	$14.69
Goods-producing	15.40	15.93	15.79	15.78	15.86	15.90	15.93	16.01	16.04	16.05	16.05	16.15	16.17	16.17	16.20
Mining	17.24	17.65	17.55	17.53	17.54	17.73	17.74	17.69	17.67	17.73	17.85	17.80	17.96	17.83	17.82
Construction	17.88	18.33	18.33	18.15	18.22	18.28	18.26	18.35	18.36	18.38	18.46	18.58	18.47	18.50	18.60
Manufacturing	14.38	14.84	14.66	14.72	14.78	14.81	14.86	14.93	14.96	14.97	15.05	15.10	15.16	15.16	15.17
Excluding overtime	13.62	14.15	13.96	14.04	14.09	14.13	14.18	14.24	14.28	14.31	14.38	14.41	14.49	14.49	14.45
Service-producing	13.24	13.85	13.68	13.73	13.76	13.84	13.87	13.93	13.98	14.01	14.07	14.13	14.24	14.27	14.27
Transportation and public utilities	16.22	16.89	16.68	16.74	16.76	16.91	16.88	16.95	17.02	17.09	17.23	17.23	17.39	17.44	17.40
Wholesale trade	15.20	15.80	15.68	15.74	15.70	15.86	15.84	15.81	15.95	15.89	15.91	16.04	16.07	16.16	16.08
Retail trade	9.46	9.82	9.72	9.74	9.79	9.83	9.84	9.87	9.87	9.91	9.98	9.99	10.05	10.03	10.05
Finance, insurance, and real estate	15.07	15.84	15.61	15.64	15.74	15.86	15.91	15.99	16.01	16.05	16.07	16.16	16.13	16.20	16.24
Services	13.91	14.61	14.40	14.48	14.49	14.54	14.61	14.71	14.76	14.81	14.87	14.94	15.07	15.10	15.10
PRIVATE SECTOR (in constant (1982) dollars)	7.86	8.00	7.95	7.94	7.93	7.95	8.00	8.03	8.02	8.06	8.11	8.16	8.21	8.19	8.15

^p = preliminary. Dash indicates data not available.

NOTE: See "Notes on the data" for a description of the most recent benchmark revision.

15. Average hourly earnings of production or nonsupervisory workers on private nonfarm payrolls, by industry

Industry	Annual average		2001										2002		
	2000	2001	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.^p	Mar.^p
PRIVATE SECTOR	$13.75	$14.33	$14.19	$14.27	$14.22	$14.22	$14.27	$14.28	$14.51	$14.50	$14.56	$14.64	$14.67	$14.68	$14.69
MINING	17.24	17.65	17.57	17.60	17.49	17.59	17.67	17.53	17.67	17.70	17.79	17.90	17.96	17.83	17.82
CONSTRUCTION	17.88	18.33	18.30	18.07	18.17	18.21	18.32	18.43	18.50	18.55	18.51	18.65	18.47	18.50	18.60
MANUFACTURING	14.38	14.84	14.65	14.74	14.75	14.79	14.84	14.89	15.01	14.97	15.07	15.19	15.16	15.16	15.17
Durable goods	14.82	15.28	15.09	15.14	15.19	15.24	15.25	15.37	15.49	15.45	15.55	15.68	15.64	15.64	15.64
Lumber and wood products	11.93	12.25	12.08	12.13	12.16	12.19	12.32	12.37	12.45	12.34	12.41	12.37	12.39	12.32	12.32
Furniture and fixtures	11.73	12.21	12.04	12.07	12.09	12.15	12.24	12.29	12.35	12.39	12.40	12.56	12.59	12.58	12.52
Stone, clay, and glass products	14.53	15.03	14.79	14.96	15.03	15.13	15.12	15.17	15.22	15.20	15.16	15.23	15.29	15.26	15.24
Primary metal industries	16.42	16.96	16.63	16.90	16.82	16.96	17.11	17.06	17.27	17.12	17.31	17.26	17.26	17.30	17.30
Blast furnaces and basic steel products	19.82	20.43	20.00	20.37	20.26	20.39	20.48	20.63	20.91	20.55	20.75	20.81	20.82	20.75	20.58
Fabricated metal products	13.87	14.26	14.08	14.11	14.23	14.25	14.27	14.34	14.42	14.33	14.44	14.63	14.56	14.53	14.62
Industrial machinery and equipment	15.55	15.91	15.77	15.74	15.79	15.82	15.90	15.96	16.05	16.09	16.15	16.33	16.34	16.31	16.30
Electronic and other electrical equipment	13.80	14.53	14.26	14.39	14.38	14.51	14.59	14.72	14.84	14.78	14.87	15.01	14.88	14.88	14.92
Transportation equipment	18.45	19.01	18.76	18.77	18.83	18.90	18.80	19.08	19.31	19.37	19.51	19.65	19.54	19.65	19.58
Motor vehicles and equipment	18.79	19.36	19.02	19.13	19.18	19.25	19.04	19.39	19.68	19.82	19.98	20.19	20.03	20.08	20.09
Instruments and related products	14.43	14.87	14.73	14.80	14.75	14.81	14.98	15.00	15.06	15.00	15.03	15.16	15.15	15.22	15.26
Miscellaneous manufacturing	11.63	12.19	12.05	12.04	12.10	12.07	12.12	12.23	12.37	12.27	12.46	12.67	12.61	12.51	12.59
Nondurable goods	13.69	14.17	13.97	14.12	14.07	14.11	14.23	14.17	14.31	14.28	14.37	14.45	14.46	14.45	14.48
Food and kindred products	12.50	12.88	12.68	12.79	12.83	12.86	12.93	12.87	12.95	12.91	13.11	13.21	13.16	13.09	13.14
Tobacco products	21.57	22.28	22.63	22.59	23.01	23.17	23.63	21.90	21.70	21.71	22.32	22.21	21.91	22.16	23.02
Textile mill products	11.16	11.35	11.31	11.30	11.29	11.32	11.37	11.39	11.40	11.34	11.43	11.52	11.64	11.61	11.65
Apparel and other textile products	9.30	9.47	9.46	9.44	9.39	9.45	9.40	9.44	9.56	9.49	9.58	9.47	9.77	9.78	9.90
Paper and allied products	16.25	16.86	16.56	16.74	16.72	16.90	16.99	16.87	17.12	17.11	17.13	17.17	17.07	17.04	17.14
Printing and publishing	14.40	14.82	14.69	14.75	14.75	14.74	14.83	14.87	15.01	14.98	14.93	15.04	15.04	15.12	15.19
Chemicals and allied products	18.15	18.59	18.33	18.64	18.52	18.55	18.69	18.54	18.86	18.70	18.74	18.81	18.84	18.96	18.89
Petroleum and coal products	22.00	22.09	21.83	22.09	21.83	21.78	22.02	22.20	22.27	22.36	22.38	21.95	22.05	22.46	22.46
Rubber and miscellaneous plastics products	12.85	13.39	13.19	13.33	13.30	13.30	13.38	13.44	13.51	13.48	13.53	13.67	13.66	13.61	13.61
Leather and leather products	10.18	10.31	10.46	10.37	10.26	10.30	10.25	10.35	10.25	10.21	10.09	10.25	10.27	10.33	10.30
TRANSPORTATION AND PUBLIC UTILITIES	16.22	16.89	16.65	16.78	16.70	16.83	16.89	16.97	17.07	17.09	17.23	17.26	17.39	17.44	17.40
WHOLESALE TRADE	15.20	15.80	15.58	15.86	15.66	15.77	15.88	15.75	16.03	15.85	15.91	16.16	16.07	16.16	16.08
RETAIL TRADE	9.46	9.82	9.74	9.78	9.78	9.77	9.77	9.79	9.92	9.93	9.98	9.99	10.05	10.03	10.05
FINANCE, INSURANCE, AND REAL ESTATE	15.07	15.84	15.67	15.81	15.74	15.75	15.85	15.84	16.05	15.98	16.04	16.21	16.13	16.20	16.24
SERVICES	13.91	14.61	14.48	14.58	14.46	14.39	14.46	14.46	14.78	14.80	14.92	15.09	15.07	15.10	15.10

^p = preliminary.

NOTE: See "Notes on the data" for a description of the most recent benchmark revision.

16. Average weekly earnings of production or nonsupervisory workers on private nonfarm payrolls, by industry

Industry	Annual average		2001										2002		
	2000	2001	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.^{p}	Mar.^{p}
PRIVATE SECTOR															
Current dollars	$474.38	$490.09	$482.46	$486.61	$484.90	$489.17	$493.74	$491.23	$497.69	$493.00	$495.04	$503.62	$492.91	$497.65	$497.99
Seasonally adjusted	–	–	486.03	485.98	487.01	489.40	490.43	489.60	492.75	491.98	495.81	499.66	492.91	497.65	497.99
Constant (1982) dollars	272.16	273.64	270.89	271.70	269.39	271.46	275.22	273.82	275.88	274.50	276.10	282.30	275.83	277.55	276.20
MINING	743.04	766.01	757.27	765.60	769.56	768.68	772.18	764.31	777.48	773.49	764.97	771.49	759.71	761.34	762.70
CONSTRUCTION	702.68	718.54	702.52	695.70	728.62	728.40	740.13	739.04	736.30	732.73	720.04	714.30	712.94	712.25	714.24
MANUFACTURING															
Current dollars	598.21	603.99	597.72	588.13	600.33	603.43	598.05	607.51	615.41	609.28	613.35	627.35	612.46	610.95	620.45
Constant (1982) dollars	343.21	337.24	335.61	328.38	333.52	334.87	333.36	338.63	341.14	339.24	342.08	351.65	342.73	340.74	344.12
Durable goods	623.92	626.48	620.20	607.11	624.31	626.36	617.63	633.24	639.74	631.91	636.00	652.29	638.11	636.55	644.37
Lumber and wood products	489.13	496.13	483.20	483.99	497.34	498.57	502.66	509.64	517.92	504.71	503.85	502.33	491.88	490.34	501.42
Furniture and fixtures	469.20	474.90	467.15	457.45	462.22	468.99	481.03	491.60	489.06	478.25	479.88	501.14	501.48	500.68	507.06
Stone, clay, and glass products	626.24	655.31	631.53	638.79	665.83	670.26	669.82	676.58	686.42	674.88	668.56	664.03	660.53	659.23	661.42
Primary metal industries	737.26	739.46	718.42	730.08	731.67	744.54	742.57	743.82	766.79	737.87	747.79	768.07	752.54	749.09	764.66
Blast furnaces and basic steel products	911.72	909.14	884.00	920.72	899.54	919.59	919.55	920.10	959.77	900.09	908.85	902.72	905.22	906.78	921.98
Fabricated metal products	590.86	588.94	585.73	567.22	589.12	589.95	582.22	595.11	598.43	590.40	594.93	617.39	599.87	600.09	608.19
Industrial machinery and equipment	656.21	657.54	651.30	628.03	644.23	640.71	640.77	640.00	648.42	648.43	649.23	669.53	660.14	655.66	660.15
Electronic and other electrical equipment	567.18	572.48	568.97	554.02	559.38	570.24	558.80	577.02	584.70	584.39	580.85	603.40	572.88	572.88	584.86
Transportation equipment	800.73	796.52	789.00	765.82	804.04	799.47	785.16	814.72	809.09	807.73	818.52	841.02	826.54	825.30	832.15
Motor vehicles and equipment	834.28	826.67	[illegible]	791.98	840.08	839.30	780.64	858.98	844.27	840.37	852.29	890.38	871.31	869.46	881.95
Instruments and related products	595.96	606.70	605.40	594.96	602.48	602.77	605.19	606.00	618.97	609.00	610.22	624.59	612.06	613.37	621.08
Miscellaneous manufacturing	453.57	462.00	461.52	450.30	458.59	463.49	458.14	468.41	467.59	462.58	464.76	483.99	467.83	471.63	484.72
Nondurable goods	558.55	571.05	561.59	559.15	564.21	568.63	569.20	571.05	582.42	576.91	589.99	[illegible]	578.40	575.11	583.54
Food and kindred products	521.25	529.37	513.54	510.32	522.18	528.55	528.84	535.39	543.90	538.35	544.07	549.54	535.61	523.60	533.48
Tobacco products	877.90	893.43	893.89	885.53	906.59	956.92	952.29	878.19	885.36	881.43	899.50	917.27	878.59	890.83	923.10
Textile mill products	459.79	454.00	458.06	444.09	454.99	458.46	444.57	456.74	458.28	540.20	454.91	466.56	464.44	470.21	485.81
Apparel and other textile products	351.54	353.23	355.70	346.45	355.88	357.21	349.68	350.22	350.85	348.28	354.46	365.31	357.58	363.82	378.18
Paper and allied products	690.63	703.06	687.24	688.01	690.54	701.35	708.48	695.04	722.46	715.20	717.75	726.29	706.70	700.34	711.31
Printing and publishing	551.52	564.64	565.57	554.60	556.08	557.17	563.54	568.03	577.89	571.47	573.31	577.54	560.99	565.49	574.18
Chemicals and allied products	771.38	786.36	773.53	790.34	783.40	782.81	790.59	778.68	797.78	791.01	794.58	799.43	789.40	786.84	791.49
Petroleum and coal products	932.80	943.24	936.51	965.33	910.31	934.36	953.47	954.60	955.38	936.88	935.48	906.54	917.28	911.88	911.88
Rubber and miscellaneous plastics products	531.99	544.97	538.15	529.20	539.98	543.97	535.20	544.32	556.61	548.64	553.36	574.14	558.69	556.65	559.37
Leather and leather products	381.75	375.28	375.51	369.17	370.39	378.01	360.80	379.85	377.20	369.60	373.33	385.40	385.13	384.28	387.28
TRANSPORTATION AND PUBLIC UTILITIES	626.09	643.51	362.70	641.00	632.93	542.91	650.27	646.55	648.66	546.00	649.57	661.06	650.39	652.26	655.98
WHOLESALE TRADE	585.20	603.56	592.04	607.44	598.59	603.99	611.38	603.23	620.36	603.89	607.76	623.78	609.05	615.70	612.65
RETAIL TRADE	273.39	282.82	276.62	281.66	280.69	283.33	288.22	286.85	285.70	283.01	284.43	291.71	281.40	286.86	287.43
FINANCE, INSURANCE, AND REAL ESTATE	547.04	547.99	564.12	580.23	565.78	570.15	581.70	571.82	589.04	571.37	577.44	594.91	579.07	588.06	586.26
SERVICES	454.86	477.75	472.05	476.77	469.95	471.99	478.63	474.29	483.31	479.52	484.90	496.46	485.25	490.75	489.24

^{p} = preliminary.

NOTE: See "Notes on the data" for a description of the most recent benchmark revision. Dash indicates data not available.

17. Diffusion indexes of employment change, seasonally adjusted

[In percent]

Timespan and year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov	Dec.
	Private nonfarm payrolls, 356 industries											
Over 1-month span:												
1998	63.2	56.2	59.3	60.2	58.9	57.1	55.4	58.4	54.8	55.0	58.2	56.4
1999	55.1	59.6	52.8	57.2	58.2	54.2	57.1	54.4	55.2	57.9	59.9	56.8
2000	55.7	59.3	61.0	54.2	47.7	60.5	57.8	55.1	52.0	54.8	55.1	54.2
2001	53.7	50.4	55.8	45.0	46.6	44.3	45.5	43.9	44.1	38.7	38.7	41.8
2002	48.9	46.2	45.6	–	–	–	–	–	–	–	–	–
Over 3-month span:												
1998	65.3	66.1	64.6	65.7	62.2	57.9	57.5	58.4	59.1	59.2	59.3	59.2
1999	60.8	57.8	58.5	55.8	58.1	57.9	[illegible]	59.2	59.8	59.1	61.0	60.6
2000	61.6	63.3	61.9	56.2	55.1	57.9	61.5	56.4	54.1	53.3	55.7	53.3
2001	51.7	54.1	48.5	49.2	42.5	42.4	40.5	39.9	38.8	35.8	35.6	37.7
2002	41.4	43.1	–	–	–	–	–	–	–	–	–	–
Over 6-month span:												
1998	70.4	67.4	65.0	62.5	63.6	60.5	59.2	58.6	57.9	59.6	60.6	59.9
1999	59.8	59.8	58.2	60.3	56.7	59.2	61.8	60.8	62.2	61.2	62.3	64.9
2000	63.5	60.6	62.6	63.7	61.5	55.5	56.1	58.6	54.2	54.8	51.8	54.2
2001	52.0	50.6	48.6	45.3	44.1	38.5	37.1	35.6	35.1	35.7	35.3	35.6
2002	–	–	–	–	–	–	–	–	–	–	–	–
Over 12-month span:												
1998	69.7	67.6	67.4	66.0	64.0	62.7	61.9	62.0	60.9	59.3	60.8	58.6
1999	61.2	60.2	58.2	60.8	60.8	61.6	62.2	61.3	63.9	63.0	61.3	60.9
2000	62.5	63.0	61.8	59.5	58.4	56.8	55.7	56.5	54.2	53.4	53.0	51.8
2001	49.6	47.7	45.0	43.1	40.5	39.8	38.4	36.8	34.7	–	–	–
2002	–	–	–	–	–	–	–	–	–	–	–	–
	Manufacturing payrolls, 139 industries											
Over 1-month span:												
1998	57.4	51.5	52.7	53.3	43.8	48.2	38.2	51.5	41.9	41.5	41.2	43.4
1999	46.9	44.5	43.0	42.3	50.4	39.3	51.5	39.3	45.2	46.3	53.3	46.7
2000	44.9	56.6	55.5	46.7	41.2	54.8	53.7	38.6	34.6	41.5	43.8	44.1
2001	37.9	32.4	41.5	31.3	29.4	33.1	39.0	27.6	36.0	29.4	25.7	29.4
2002	39.0	41.9	42.3	–	–	–	–	–	–	–	–	–
Over 3-month span:												
1998	59.6	59.6	55.9	50.4	46.7	37.9	41.5	41.5	41.9	38.2	36.8	40.8
1999	41.2	39.0	38.2	41.8	40.8	45.2	39.0	45.2	40.8	44.9	46.3	46.0
2000	50.0	54.0	52.9	42.3	43.0	48.5	48.2	33.6	28.7	30.5	39.0	35.7
2001	28.3	29.4	24.6	26.5	22.4	24.6	21.0	19.9	19.9	21.0	17.6	20.2
2002	27.2	32.7	–	–	–	–	–	–	–	–	–	–
Over 6-month span:												
1998	63.2	54.4	50.4	40.4	44.5	40.1	37.5	36.4	34.9	40.1	37.1	34.2
1999	36.0	38.2	37.5	41.2	36.8	39.7	43.0	41.5	46.0	40.4	46.3	51.5
2000	51.5	44.5	48.5	55.1	43.8	34.9	33.5	34.6	30.1	29.4	25.0	27.9
2001	26.8	25.4	19.9	20.6	20.2	15.1	13.2	14.0	11.8	14.7	18.8	18.8
2002	–	–	–	–	–	–	–	–	–	–	–	–
Over 12-month span:												
1998	54.8	52.2	51.8	46.7	40.4	40.1	38.2	37.5	36.4	34.6	35.7	34.2
1999	38.6	34.6	32.4	36.0	37.9	39.0	40.1	40.4	44.5	46.0	44.9	44.5
2000	46.3	45.2	41.2	37.9	33.8	31.3	31.3	31.3	27.6	25.4	24.3	21.3
2001	19.1	16.5	14.7	16.2	15.1	12.1	12.9	12.5	12.5	–	–	–
2002	–	–	–	–	–	–	–	–	–	–	–	–

Dash indicates data not available.

NOTE: Figures are the percent of industries with employment increasing plus one-half of the industries with unchanged employment, where 50 percent indicates an equal balance between industries with inceasing and decreasing employment.

Data for the 2 most recent months shown in each span are preliminary. See the "Definitions" in this section. See "Notes on the data" for a description of the most recent benchmark revision.

18. Establishment size and employment covered under UI, private ownership, by major industry division, first quarter 2000

Industry, establishments, and employment	Total	Size of establishments								
		Fewer than 5 workers[1]	5 to 9 workers	10 to 19 workers	20 to 49 workers	50 to 99 workers	100 to 249 workers	250 to 499 workers	500 to 999 workers	1,000 or more workers
Total, all industries[2]										
Establishments, first quarter	7,531,330	4,413,181	1,302,488	850,411	590,862	206,415	119,172	31,311	11,713	5,977
Employment, March	108,195,174	6,831,146	8,615,974	11,471,927	17,878,154	14,212,796	17,895,603	10,658,780	7,965,372	12,665,422
Agriculture, forestry, and fishing										
Establishments, first quarter	200,289	123,880	37,646	22,736	11,179	2,875	1,473	370	106	24
Employment, March	1,702,493	179,158	248,989	302,599	326,510	196,681	216,828	126,181	69,476	36,271
Mining										
Establishments, first quarter	27,284	14,102	4,323	3,726	3,202	1,023	591	214	76	25
Employment, March	524,514	22,082	28,959	51,183	97,241	69,762	89,714	74,836	52,916	37,821
Construction										
Establishments, first quarter	747,563	477,549	126,844	76,253	46,543	13,242	5,748	1,053	272	59
Employment, March	6,310,456	703,310	831,405	1,024,819	1,389,870	898,785	846,893	347,400	182,357	85,617
Manufacturing										
Establishments, first quarter	405,838	147,029	67,385	61,150	61,487	30,568	24,264	8,646	3,598	1,711
Employment, March	18,433,795	251,154	453,397	842,691	1,922,360	2,144,676	3,739,308	2,977,743	2,446,323	3,656,143
Transportation and public utilities										
Establishments, first quarter	315,413	174,845	49,173	36,475	30,720	12,952	7,913	2,127	892	516
Employment, March	6,678,516	272,380	325,334	498,572	945,800	895,012	1,190,459	726,615	618,630	1,205,714
Wholesale trade										
Establishments, first quarter	664,094	400,335	110,091	77,321	52,153	15,187	7,019	1,478	414	96
Employment, March	6,947,770	621,924	729,753	1,046,983	1,565,369	1,035,060	1,035,170	496,350	274,988	142,183
Retail trade										
Establishments, first quarter	1,458,626	623,529	329,260	235,941	179,053	57,988	26,380	4,982	1,169	324
Employment, March	22,807,395	1,154,942	2,204,569	3,190,042	5,437,335	3,943,391	3,880,016	1,659,975	764,056	573,069
Finance, insurance, and real estate										
Establishments, first quarter	671,294	438,402	114,349	62,141	35,549	11,618	6,025	1,799	898	513
Employment, March	7,379,831	714,292	751,197	826,817	1,065,116	797,168	912,396	621,570	615,246	1,076,029
Services										
Establishments, first quarter	2,890,313	1,879,338	451,715	271,168	169,867	60,864	38,727	10,640	4,286	2,708
Employment, March	37,110,557	2,772,133	2,967,673	3,643,823	5,102,854	4,225,937	5,980,102	3,627,319	2,938,641	5,851,075

[1] Includes establishments that reported no workers in March 2000.

[2] Includes data for nonclassifiable establishments, not shown separately.

NOTE: Detail may not add to totals due to rounding.

19. Annual data: establishments, employment, and wages covered under UI and UCFE by ownership

Year	Average establishments	Average annual employment	Total annual wages (in thousands)	Average annual wages per employee	Average weekly wage
	Total covered (UI and UCFE)				
1991	6,382,523	106,884,831	$2,626,972,030	$24,578	$473
1992	6,532,608	107,413,728	2,781,676,477	25,897	498
1993	6,679,934	109,422,571	2,884,472,282	26,361	507
1994	6,826,677	112,611,287	3,033,676,678	26,939	518
1995	7,040,677	115,487,841	3,215,921,236	27,846	536
1996	7,189,168	117,963,132	3,414,514,808	28,946	557
1997	7,369,473	121,044,432	3,674,031,718	30,353	584
1998	7,634,018	124,183,549	3,967,072,423	31,945	614
1999	7,820,860	127,042,282	4,235,579,204	33,340	641
2000	7,879,116	129,877,063	4,587,708,584	35,323	679
	UI covered				
1991	6,336,151	103,755,832	$2,524,937,018	$24,335	$468
1992	6,485,473	104,288,324	2,672,081,827	25,622	493
1993	6,632,221	106,351,431	2,771,023,411	26,056	501
1994	6,778,300	109,588,189	2,918,684,128	26,633	512
1995	6,990,594	112,539,795	3,102,353,355	27,567	530
1996	7,137,644	115,081,246	3,298,045,286	28,658	551
1997	7,317,363	118,233,942	3,553,933,885	30,058	578
1998	7,586,767	121,400,660	3,845,494,089	31,676	609
1999	7,771,198	124,255,714	4,112,169,533	33,094	636
2000	7,828,861	127,005,574	4,454,966,824	35,077	675
	Private industry covered				
1991	6,162,684	89,007,096	$2,152,021,705	$24,178	$465
1992	6,308,719	89,349,803	2,282,598,431	25,547	491
1993	6,454,381	91,202,971	2,365,301,493	25,934	499
1994	6,596,158	94,146,344	2,494,458,555	26,496	510
1995	6,803,454	96,894,844	2,658,927,216	27,441	528
1996	6,946,858	99,268,446	2,837,334,217	28,582	550
1997	7,121,182	102,175,161	3,071,807,287	30,064	578
1998	7,381,518	105,082,368	3,337,621,699	31,762	611
1999	7,560,567	107,619,457	3,577,738,557	33,244	639
2000	7,622,274	110,015,333	3,887,626,769	35,337	680
	State government covered				
1991	58,499	4,005,321	$108,672,127	$27,132	$522
1992	58,801	4,044,914	112,405,340	27,789	534
1993	59,185	4,088,075	117,095,062	28,643	551
1994	60,686	4,162,944	122,819,977	29,518	568
1995	60,763	4,201,836	128,143,491	30,497	586
1996	62,146	4,191,726	131,605,200	31,397	604
1997	65,352	4,214,451	137,057,432	32,521	625
1998	67,347	4,240,779	142,512,445	33,605	646
1999	70,538	4,296,673	149,011,194	34,681	667
2000	65,096	4,370,160	158,618,365	36,296	698
	Local government covered				
1991	114,936	10,742,558	$264,215,610	$24,595	$473
1992	117,923	10,892,697	277,045,557	25,434	489
1993	118,626	11,059,500	288,594,697	26,095	502
1994	121,425	11,278,080	301,315,857	26,717	514
1995	126,342	11,442,238	315,252,346	27,552	530
1996	128,640	11,621,074	329,105,269	28,320	545
1997	130,829	11,844,330	345,069,166	29,134	560
1998	137,902	12,077,513	365,359,945	30,251	582
1999	140,093	12,339,584	385,419,781	31,234	601
2000	141,491	12,620,081	408,721,690	32,387	623
	Federal Government covered (UCFE)				
1991	46,372	3,128,999	$102,035,012	$32,609	$627
1992	47,136	3,125,404	109,594,650	35,066	674
1993	47,714	3,071,140	113,448,871	36,940	710
1994	48,377	3,023,098	114,992,550	38,038	731
1995	50,083	2,948,046	113,567,881	38,523	741
1996	51,524	2,881,887	116,469,523	40,414	777
1997	52,110	2,810,489	120,097,833	42,732	822
1998	47,252	2,782,888	121,578,334	43,688	840
1999	49,661	2,786,567	123,409,672	44,287	852
2000	50,256	2,871,489	132,741,760	46,228	889

NOTE: Detail may not add to totals due to rounding.

20. Annual data: establishments, employment, and wages covered under UI and UCFE, by State

State	Average establishments		Average annual employment		Total annual wages (in thousands)		Average weekly wage	
	2000	1999-2000 change	2000	1999-2000 change	2000	1999-2000 change	2000	1999-2000 change
Total United States	7,879,116	58,256	129,877,063	2,834,781	$4,587,708,584	$352,129,380	$679	$38
Alabama	112,328	454	1,877,963	6,911	54,538,027	1,970,401	558	18
Alaska	18,820	32	275,607	6,674	9,685,341	532,709	676	22
Arizona	115,171	2,589	2,220,712	70,174	72,417,033	6,772,271	627	40
Arkansas	72,240	406	1,130,891	17,750	29,761,939	1,520,062	506	18
California	1,026,568	-33,271	14,867,006	472,932	612,318,313	71,430,084	792	69
Colorado	148,479	6,278	2,186,656	81,474	81,273,035	9,292,033	715	57
Connecticut	107,787	1,696	1,674,728	22,363	76,176,856	5,650,414	875	54
Delaware	24,751	584	406,350	4,210	14,845,185	707,255	703	27
District of Columbia	28,409	1,474	637,292	21,588	33,753,742	2,423,907	1,019	40
Florida	444,731	9,134	7,060,986	216,337	215,780,400	17,731,492	588	32
Georgia	225,040	6,628	3,883,005	88,250	132,853,189	10,161,751	658	36
Hawaii	34,027	1,564	553,185	15,440	16,942,944	921,218	589	16
Idaho	45,399	1,128	563,193	20,785	15,600,825	1,474,196	533	32
Illinois	322,324	2,721	5,940,772	90,253	226,012,936	13,664,320	732	34
Indiana	152,846	-1,089	2,936,634	29,778	91,086,141	3,800,930	596	19
Iowa	97,091	2,479	1,443,394	12,412	40,312,331	1,743,623	537	19
Kansas	80,477	1,036	1,313,742	14,945	38,571,763	2,164,568	565	26
Kentucky	107,740	2,403	1,762,949	31,482	50,774,667	2,669,580	554	20
Louisiana	118,216	1,549	1,869,219	21,317	52,131,235	1,838,194	536	13
Maine	44,865	956	590,818	17,005	16,344,365	916,386	532	15
Maryland	146,559	1,117	2,405,510	58,631	87,548,876	6,606,334	700	37
Massachusetts	187,391	344	3,275,135	83,493	145,184,150	16,396,342	852	76
Michigan	260,885	2,244	4,585,211	82,445	169,702,272	8,726,750	712	24
Minnesota	155,711	4,932	2,608,543	57,751	92,377,120	6,959,859	681	37
Mississippi	63,970	229	1,137,304	-1,880	28,665,889	879,567	485	16
Missouri	163,080	2,303	2,677,110	31,687	84,020,093	4,745,993	604	28
Montana	38,349	1,585	379,094	7,855	9,202,211	567,364	467	20
Nebraska	51,838	4	882,918	16,308	24,449,709	1,370,028	533	21
Nevada	48,126	194	1,017,902	41,975	32,853,744	2,392,271	621	21
New Hampshire	45,924	494	606,543	15,318	21,069,920	2,067,493	668	50
New Jersey	270,384	-15,337	3,877,572	85,195	169,355,641	13,725,235	840	51
New Mexico	47,987	693	717,243	16,339	19,722,105	1,311,285	529	24
New York	529,103	4,797	8,471,416	178,874	384,241,451	34,472,229	872	61
North Carolina	222,234	7,270	3,862,782	58,413	120,007,446	7,922,007	597	30
North Dakota	23,297	240	309,223	3,263	7,632,600	365,713	475	18
Ohio	290,988	1,073	5,513,217	62,090	179,218,763	8,080,924	625	21
Oklahoma	89,298	1,368	1,452,166	29,357	39,191,626	2,464,854	519	23
Oregon	109,050	-1,296	1,608,069	32,067	52,703,467	4,049,166	630	36
Pennsylvania	315,284	13,267	5,558,076	98,602	189,058,210	10,557,733	654	25
Rhode Island	33,327	621	467,602	10,766	15,250,760	1,011,495	627	28
South Carolina	109,370	-1,993	1,820,138	27,993	51,289,516	2,664,765	542	20
South Dakota	27,145	437	364,119	8,334	9,030,727	574,920	477	20
Tennessee	125,247	-51	2,667,230	40,186	81,496,110	4,055,765	588	21
Texas	489,795	8,425	9,289,286	272,845	324,579,635	27,952,132	672	39
Utah	66,144	2,282	1,044,143	26,519	30,518,872	2,131,853	562	26
Vermont	23,870	805	296,462	8,473	8,571,976	624,326	556	25
Virginia	192,745	3,212	3,427,954	100,832	120,567,926	10,689,950	676	41
Washington	221,150	9,010	2,706,462	62,732	100,381,521	5,904,038	713	26
West Virginia	46,830	21	686,622	6,014	18,461,154	752,890	517	17
Wisconsin	145,871	977	2,736,054	44,603	83,980,263	4,294,806	590	21
Wyoming	20,861	238	230,857	5,892	6,195,607	425,897	516	23
Puerto Rico	52,371	202	1,026,175	23,785	19,306,364	709,126	362	5
Virgin Islands	3,255	32	42,349	1,411	1,173,955	104,996	533	31

NOTE: Detail may not add to totals due to rounding.

21. Annual data: Employment and average annual pay for all workers covered under UI and UCFE in the 316 largest U.S. counties

County[1]	Employment			Average annual pay	
	2000	Percent change, 1999-2000[2]	Ranked by percent change, 1999-2000[3]	2000	Percent change, 1999-2000[2]
United States[4]	129,877,063	2.2	–	35,323	5.9
Jefferson, AL	384,662	.6	256	34,026	3.9
Madison, AL	154,356	1.7	186	35,837	5.0
Mobile, AL	169,469	-.1	291	28,623	2.4
Montgomery, AL	131,988	.2	285	28,894	3.2
Tuscaloosa, AL	76,499	.8	244	29,064	2.5
Anchorage, AK	129,700	2.0	164	36,659	2.7
Maricopa, AZ	1,544,971	3.6	48	35,110	7.8
Pima, AZ	328,426	3.1	77	29,194	3.5
Pulaski, AR	243,157	.4	272	30,799	3.8
Sebastian, AR	75,197	1.1	228	27,011	4.8
Washington, AR	80,045	3.3	61	26,408	3.8
Alameda, CA	696,242	3.0	84	45,091	9.8
Contra Costa, CA	336,691	3.1	78	42,318	3.7
Fresno, CA	322,759	1.9	169	26,162	4.8
Kern, CA	238,250	2.1	153	28,572	5.7
Los Angeles, CA	4,098,154	1.7	187	39,651	4.9
Marin, CA	111,645	2.1	154	42,600	8.5
Monterey, CA	164,646	2.5	118	29,962	5.1
Orange, CA	1,394,414	3.6	49	39,247	4.8
Placer, CA	107,182	8.9	3	33,386	5.3
Riverside, CA	469,467	5.3	12	29,136	4.7
Sacramento, CA	573,942	2.8	107	37,732	7.2
San Bernardino, CA	528,437	3.0	85	29,901	3.8
San Diego, CA	1,195,116	3.0	86	37,535	8.1
San Francisco, CA	609,138	3.7	43	57,532	12.0
San Joaquin, CA	201,070	3.1	79	29,237	4.7
San Luis Obispo, CA	94,883	3.6	50	28,096	6.2
San Mateo, CA	378,494	5.3	13	67,051	30.4
Santa Barbara, CA	176,901	3.0	87	32,566	8.2
Santa Clara, CA	1,030,633	6.1	9	76,213	24.7
Santa Cruz, CA	101,833	3.3	62	35,819	15.5
Solano, CA	117,217	3.7	44	31,670	8.4
Sonoma, CA	190,946	3.1	80	35,715	11.3
Stanislaus, CA	160,948	1.7	188	28,201	4.4
Tulare, CA	132,986	3.6	51	23,750	4.6
Ventura, CA	287,611	3.4	57	37,069	9.1
Yolo, CA	84,565	1.5	201	33,438	3.3
Adams, CO	144,806	3.6	52	33,428	4.8
Arapahoe, CO	284,236	3.9	38	46,254	7.8
Boulder, CO	179,719	8.2	4	45,564	13.9
Denver, CO	469,137	3.2	69	44,343	11.6
El Paso, CO	237,739	3.4	58	33,039	7.7
Jefferson, CO	210,519	2.8	108	36,195	5.2
Larimer, CO	119,155	5.1	16	32,394	7.9
Fairfield, CT	427,557	1.1	229	61,156	8.5
Hartford, CT	501,562	1.1	230	43,656	6.2
New Haven, CT	367,343	1.1	231	38,355	5.4
New London, CT	123,039	.6	257	36,757	3.8
New Castle, DE	281,920	-.7	301	40,491	4.5
Washington, DC	637,292	3.5	54	52,964	4.1
Alachua, FL	117,658	2.5	119	26,155	3.9
Brevard, FL	181,314	3.3	63	32,101	7.2
Broward, FL	644,192	3.3	64	33,234	6.5
Collier, FL	103,264	6.9	6	29,962	6.9
Duval, FL	434,219	4.1	32	32,777	4.6
Escambia, FL	125,666	1.0	235	26,709	4.5
Hillsborough, FL	588,792	2.5	120	31,707	4.8
Lee, FL	162,304	4.4	25	28,148	6.4
Leon, FL	141,978	2.2	142	29,249	4.1
Manatee, FL	(5)	(5)	(5)	(5)	(5)
Marion, FL	83,319	1.7	189	24,953	3.3
Miami-Dade, FL	980,394	2.3	135	33,333	3.9
Orange, FL	611,469	3.2	70	31,123	4.6
Palm Beach, FL	481,395	4.1	33	35,233	7.3
Pinellas, FL	436,390	4.2	29	31,263	5.4
Polk, FL	183,222	2.6	109	27,881	3.5
Sarasota, FL	(5)	(5)	(5)	(5)	(5)
Seminole, FL	139,610	4.6	23	30,835	6.9
Volusia, FL	141,652	1.4	207	25,079	5.5
Bibb, GA	88,790	-1.2	308	29,299	3.2
Chatham, GA	122,785	1.3	214	29,650	1.9
Clayton, GA	116,368	-.6	296	36,774	6.7
Cobb, GA	301,183	1.3	215	38,782	5.4

See footnotes at end of table.

21. Continued—Annual data: Employment and average annual pay for all workers covered under UI and UCFE in the 316 largest U.S. counties

County[1]	Employment			Average annual pay	
	2000	Percent change, 1999-2000[2]	Ranked by percent change, 1999-2000[2]	2000	Percent change, 1999-2000[2]
Dekalb, GA	310,659	-.6	297	38,614	4.9
Fulton, GA	754,368	2.7	103	47,060	8.5
Gwinnett, GA	281,654	4.1	34	39,051	6.0
Muscogee, GA	98,315	-.1	292	27,744	3.7
Richmond, GA	106,260	-.6	298	28,592	3.6
Honolulu, HI	407,935	2.6	110	31,874	2.8
Ada, ID	177,741	6.5	8	34,460	10.0
Champaign, IL	90,429	2.8	96	29,183	4.2
Cook, IL	2,687,795	1.3	216	42,898	5.8
Du Page, IL	582,352	1.7	190	42,570	3.6
Kane, IL	193,410	2.9	91	32,173	.1
Lake, IL	310,689	3.1	81	42,620	6.7
McHenry, IL	87,258	1.9	170	32,007	2.0
McLean, IL	84,324	.6	258	34,254	4.1
Madison, IL	94,550	.4	273	28,974	2.9
Peoria, IL	102,801	.1	287	31,367	1.6
Rock Island, IL	80,273	.8	245	33,525	4.5
St. Clair, IL	[illegible]	2.2	143	26,678	2.6
Sangamon, IL	[illegible]	4.4	26	34,764	1.7
Will, IL	142,355	3.5	55	32,313	2.1
Winnebago, IL	143,760	.5	265	31,499	2.0
Allen, IN	189,425	.3	281	32,279	3.0
Elkhart, IN	122,468	.6	259	30,339	2.3
Hamilton, IN	77,452	3.0	68	37,931	7.9
Lake, IN	199,421	-.6	296	31,564	4.0
Marion, IN	605,903	1.6	194	36,473	3.2
St. Joseph, IN	129,558	.5	266	29,657	3.5
Tippecanoe, IN	77,377	1.1	232	31,083	4.0
Vanderburgh, IN	109,904	.7	251	29,569	3.2
Linn, IA	121,968	2.1	155	34,097	4.9
Polk, IA	263,940	1.3	217	33,666	2.5
Scott, IA	87,113	-.4	295	29,067	3.9
Johnson, KS	287,797	2.8	97	37,247	6.7
Sedgwick, KS	249,846	.0	289	32,696	2.9
Shawnee, KS	100,223	2.4	130	29,375	3.2
Wyandotte, KS	79,746	1.8	177	34,592	2.9
Fayette, KY	172,031	1.8	178	30,713	3.8
Jefferson, KY	439,103	1.4	208	33,334	3.9
Caddo, LA	119,449	.3	282	28,767	3.2
Calcasieu, LA	83,976	.1	288	28,226	.9
East Baton Rouge, LA	246,434	2.7	104	29,257	1.6
Jefferson, LA	214,680	-.7	302	28,051	2.1
Lafayette, LA	114,059	2.3	136	29,911	5.5
Orleans, LA	263,551	1.9	171	31,694	1.3
Cumberland, ME	166,757	3.7	45	30,752	1.1
Anne Arundel, MD	194,018	5.3	14	35,461	7.3
Baltimore, MD	358,117	1.2	222	34,119	4.7
Frederick, MD	77,323	4.9	22	30,847	5.9
Howard, MD	128,678	3.2	71	37,897	5.1
Montgomery, MD	447,314	5.0	20	43,708	5.8
Prince Georges, MD	303,262	3.3	65	37,060	6.9
Baltimore City, MD	386,411	.8	246	38,579	4.5
Barnstable, MA	88,589	3.7	46	[illegible]	.0
Bristol, MA	221,539	1.3	218	30,785	4.6
Essex, MA	306,382	2.5	121	39,154	8.8
Hampden, MA	204,303	1.9	172	32,220	4.8
Middlesex, MA	846,931	3.1	82	52,091	11.8
Norfolk, MA	325,018	2.4	131	43,368	10.4
Plymouth, MA	166,482	1.3	219	33,931	6.3
Suffolk, MA	608,285	3.3	66	56,699	11.6
Worcester, MA	321,131	2.5	122	37,657	10.8
Genesee, MI	165,297	-1.4	313	36,324	1.4
Ingham, MI	174,315	2.0	165	34,963	5.6
Kalamazoo, MI	118,342	-.1	293	32,675	2.3
Kent, MI	347,707	1.6	195	33,996	2.6
Macomb, MI	337,504	.3	283	40,904	3.5
Oakland, MI	768,629	1.0	236	44,500	4.2
Ottawa, MI	118,711	1.8	179	31,947	3.5
Saginaw, MI	95,474	-.8	304	34,672	2.5
Washtenaw, MI	195,624	.5	267	40,182	5.3
Wayne, MI	866,282	1.2	223	42,440	3.5
Anoka, MN	108,989	3.8	40	33,928	4.5
Dakota, MN	153,364	2.6	111	34,362	4.7
Hennepin, MN	874,693	2.1	156	43,816	7.1
Olmsted, MN	82,670	3.9	39	36,104	3.1

See footnotes at end of table.

21. Continued—Annual data: Employment and average annual pay for all workers covered under UI and UCFE in the 316 largest U.S. counties

County[1]	Employment			Average annual pay	
	2000	Percent change, 1999-2000[2]	Ranked by percent change, 1999-2000[2]	2000	Percent change, 1999-2000[2]
Ramsey, MN	332,929	1.6	196	39,069	5.8
St. Louis, MN	94,926	1.4	209	28,903	4.6
Stearns, MN	76,292	3.1	83	27,584	4.2
Harrison, MS	89,745	.4	274	25,442	4.8
Hinds, MS	136,949	-1.2	309	30,578	4.6
Boone, MO	75,785	2.8	98	27,361	3.1
Clay, MO	84,159	.0	290	32,207	6.4
Greene, MO	142,508	2.4	132	26,971	3.2
Jackson, MO	393,761	.4	275	36,056	6.2
St. Charles, MO	95,799	3.2	72	29,515	3.8
St. Louis, MO	646,858	.8	247	38,145	5.6
St. Louis City, MO	250,878	.4	276	38,612	4.1
Douglas, NE	330,128	2.1	157	32,356	4.1
Lancaster, NE	146,433	1.8	180	28,511	3.9
Clark, NV	697,575	5.3	15	32,131	3.4
Washoe, NV	189,102	3.2	73	32,748	4.4
Hillsborough, NH	193,796	2.7	105	39,212	9.1
Rockingham, NH	129,494	4.1	35	35,823	9.8
Atlantic, NJ	140,141	-.2	294	31,068	3.4
Bergen, NJ	448,513	.5	268	46,306	7.0
Burlington, NJ	180,165	.8	248	37,597	4.7
Camden, NJ	199,768	-1.1	307	35,130	3.2
Essex, NJ	363,942	1.6	197	44,653	3.5
Gloucester, NJ	86,667	.7	252	32,055	2.8
Hudson, NJ	238,388	3.4	59	47,427	10.2
Mercer, NJ	210,031	3.3	67	44,858	5.2
Middlesex, NJ	392,427	.6	260	46,487	5.8
Monmouth, NJ	233,285	2.5	123	39,695	5.4
Morris, NJ	275,499	2.8	99	60,487	19.0
Ocean, NJ	129,093	2.5	124	30,447	4.6
Passaic, NJ	177,364	.6	261	37,759	2.0
Somerset, NJ	173,571	4.1	36	54,781	5.1
Union, NJ	237,176	2.2	144	45,282	4.9
Bernalillo, NM	307,705	2.6	112	30,184	4.1
Albany, NY	230,962	1.4	210	35,795	6.1
Bronx, NY	212,982	2.2	145	32,850	2.7
Broome, NY	99,613	1.2	224	29,658	3.6
Dutchess, NY	109,949	1.9	173	36,065	2.2
Erie, NY	459,828	1.0	237	31,486	3.0
Kings, NY	441,916	2.3	137	30,76[illegible]	3.7
Monroe, NY	399,602	.9	242	35,4[illegible]3	1.8
Nassau, NY	598,538	1.6	198	40,023	4.4
New York, NY	2,382,175	3.2	74	72,572	10.3
Niagara, NY	78,186	.2	286	31,112	3.7
Oneida, NY	110,684	1.4	211	27,300	3.4
Onondaga, NY	252,476	.7	253	32,499	3.4
Orange, NY	119,571	1.6	199	29,357	4.6
Queens, NY	480,676	1.3	220	34,986	4.4
Richmond, NY	88,245	1.9	174	32,149	4.2
Rockland, NY	106,361	1.4	212	37,264	4.3
Suffolk, NY	578,401	2.3	138	37,862	6.6
Westchester, NY	406,440	2.3	139	47,066	8.3
Buncombe, NC	106,036	.5	269	27,652	3.8
Catawba, NC	101,321	2.6	113	28,210	4.0
Cumberland, NC	109,856	1.2	225	26,112	3.9
Durham, NC	167,191	2.9	92	49,359	12.6
Forsyth, NC	181,619	1.8	181	34,011	6.[illegible]
Gaston, NC	77,176	-3.6	314	28,335	4.0
Guilford, NC	279,889	.6	262	32,216	2.[illegible]
Mecklenburg, NC	514,223	3.8	41	40,538	5.4
New Hanover, NC	87,019	.4	277	28,560	4.3
Wake, NC	383,705	3.3	68	35,377	7.4
Cass, ND	81,823	2.2	146	27,801	4.1
Butler, OH	126,189	2.6	1[illegible]4	31,502	1.7
Cuyahoga, OH	817,572	.9	243	36,520	4.2
Franklin, OH	701,913	2.2	147	34,970	4.6
Hamilton, OH	566,965	.8	249	37,508	3.[illegible]
Lake, OH	102,320	1.5	202	30,735	2.1
Lorain, OH	105,988	2.3	140	32,013	1.9
Lucas, OH	238,450	.6	263	32,255	2.3
Mahoning, OH	112,531	-.6	300	25,966	3.0
Montgomery, OH	303,352	.4	278	34,532	2.6
Stark, OH	175,536	1.7	191	2[illegible],305	2.1
Summit, OH	266,001	.4	279	32,735	4.2

See footnotes at end of table.

21. Continued—Annual data: Employment and average annual pay for all workers covered under UI and UCFE in the 316 largest U.S. counties

County[1]	Employment			Average annual pay	
	2000	Percent change, 1999-2000[2]	Ranked by percent change, 1999-2000[2]	2000	Percent change, 1999-2000[2]
Trumbull, OH	94,382	-1.3	311	32,785	1.0
Oklahoma, OK	414,239	2.9	93	29,216	4.6
Tulsa, OK	340,671	2.5	125	31,157	3.7
Clackamas, OR	133,065	2.2	148	32,482	4.0
Lane, OR	139,710	1.1	233	27,877	3.5
Marion, OR	127,558	2.0	166	28,116	2.9
Multnomah, OR	453,274	2.1	158	36,796	6.2
Washington, OR	224,033	4.3	27	44,459	13.4
Allegheny, PA	711,068	1.2	226	36,727	2.5
Berks, PA	168,068	1.8	182	32,007	3.3
Bucks, PA	244,317	2.5	126	34,059	3.4
Chester, PA	216,777	2.5	127	43,762	6.9
Cumberland, PA	123,998	-1.3	312	32,811	3.2
Dauphin, PA	172,465	2.1	159	33,680	2.2
Delaware, PA	212,540	1.0	238	36,828	5.5
Erie, PA	131,700	2.5	128	28,368	1.8
Lackawanna, PA	98,383	-.7	303	27,663	7.5
Lancaster, PA	218,280	1.8	183	30,809	4.6
Lehigh, PA	171,175	2.0	167	35,274	2.5
Luzerne, PA	143,066	2.2	149	27,855	2.7
Montgomery, PA	481,011	2.3	141	43,810	6.5
Northampton, PA	87,846	3.0	89	30,767	3.1
Philadelphia, PA	668,793	1.5	203	39,700	4.5
Westmoreland, PA	134,436	1.0	239	27,992	1.3
York, PA	167,757	2.2	150	30,926	3.3
Providence, RI	290,809	1.7	192	33,410	4.0
Charleston, SC	182,793	1.3	221	27,680	4.8
Greenville, SC	233,062	2.6	115	31,281	4.0
Horry, SC	99,124	1.7	193	22,883	5.4
Lexington, SC	81,341	2.0	168	27,505	3.5
Richland, SC	207,508	.6	264	29,627	4.1
Spartanburg, SC	119,791	.5	270	30,596	3.4
Minnehaha, SD	105,837	3.2	75	28,212	3.7
Davidson, TN	434,901	1.5	204	34,863	5.4
Hamilton, TN	188,161	1.8	184	30,574	4.0
Knox, TN	202,638	3.4	60	30,090	4.1
Rutherford, TN	76,993	2.5	129	31,132	3.6
Shelby, TN	500,255	1.0	240	34,357	2.5
Bell, TX	87,850	2.1	160	25,193	4.1
Bexar, TX	648,942	2.2	151	29,923	5.2
Brazoria, TX	75,417	2.8	100	34,367	3.3
Cameron, TX	109,115	5.4	11	21,553	2.6
Collin, TX	167,956	5.9	10	40,509	5.8
Dallas, TX	1,567,626	4.2	30	44,381	7.7
Denton, TX	119,722	3.7	47	29,298	4.0
El Paso, TX	251,557	1.5	205	25,069	3.2
Fort Bend, TX	87,763	2.4	133	35,801	5.1
Galveston, TX	86,844	-1.0	306	29,518	4.0
Harris, TX	1,840,442	2.8	101	41,869	7.7
Hidalgo, TX	163,443	7.1	5	21,671	2.7
Jefferson, TX	120,815	1.1	234	31,277	.8
Lubbock, TX	115,422	1.9	175	26,297	6.3
Mc Lennan, TX	98,076	1.0	241	27,034	2.1
Montgomery, TX	76,865	5.0	21	32,119	9.7
Nueces, TX	142,309	.8	250	28,187	4.7
Potter, TX	75,572	.7	254	26,552	2.8
Smith, TX	83,353	2.8	102	29,509	3.6
Tarrant, TX	703,025	3.5	56	35,438	5.0
Travis, TX	538,193	5.1	17	41,332	7.0
Williamson, TX	76,588	9.5	2	50,415	-4.5
Davis, UT	84,640	3.2	76	27,711	7.2
Salt Lake, UT	531,240	2.6	116	32,192	5.0
Utah, UT	142,369	4.5	24	27,891	5.0
Weber, UT	86,404	.4	280	26,644	2.5
Chittenden, VT	95,343	5.1	18	34,288	4.2
Arlington, VA	157,906	4.1	37	52,846	7.1
Chesterfield, VA	107,932	2.1	161	31,880	3.5
Fairfax, VA	537,647	6.7	7	51,576	10.3
Henrico, VA	165,617	2.4	134	36,138	5.8
Loudoun, VA	87,265	11.9	1	54,141	3.6
Prince William, VA	78,209	4.3	28	28,986	5.5
Alexandria, VA	91,818	5.1	19	42,101	6.1
Chesapeake, VA	81,294	2.1	162	26,069	4.2
Newport News, VA	93,607	1.8	185	30,261	5.4
Norfolk, VA	145,197	.3	284	32,179	4.9

See footnotes at end of table.

21. Continued—Annual data: Employment and average annual pay for all workers covered under UI and UCFE in the 316 largest U.S. counties

County[1]	Employment: 2000	Employment: Percent change, 1999-2000[2]	Employment: Ranked by percent change, 1999-2000[3]	Average annual pay: 2000	Average annual pay: Percent change, 1999-2000[2]
Richmond, VA	166,923	1.4	213	38,636	5.1
Roanoke City, VA	75,894	3.0	90	29,487	4.8
Virginia Beach, VA	165,610	3.6	53	25,414	4.4
Clark, WA	113,910	1.5	206	32,163	6.0
King, WA	1,162,290	2.7	108	47,459	3.0
Pierce, WA	241,654	4.2	31	29,854	4.2
Snohomish, WA	209,567	-1.2	310	35,091	3.6
Spokane, WA	188,843	2.9	94	29,760	7.0
Thurston, WA	84,277	1.8	200	31,745	6.9
Yakima, WA	94,233	1.9	176	23,237	3.7
Kanawha, WV	112,820	.7	256	30,156	3.1
Brown, WI	142,355	2.1	163	31,538	2.9
Dane, WI	274,353	2.8	117	32,817	5.5
Milwaukee, WI	528,837	.5	271	34,744	3.1
Outagamie, WI	94,364	2.9	95	30,789	4.4
Racine, WI	79,160	-.9	305	32,536	-.8
Waukesha, WI	222,877	1.2	227	35,767	5.2
Winnebago, WI	90,256	2.2	152	33,622	2.7
San Juan, PR	327,187	3.8	42	21,312	3.5

[1] Includes areas not officially designated as counties. See Notes on Current Labor Statistics.

[2] Percent changes were computed from annual employment and pay data adjusted for noneconomic county reclassifications. See Notes on Current Labor Statistics.

[3] Rankings for percent change in employment are based on the 314 counties that are comparable over the year.

[4] Totals for the United States do not include data for Puerto Rico.

[5] Data are not available for release.

Note: Data pertain to workers covered by Unemployment Insurance (UI) and Unemployment Compensation for Federal Employees (UCFE) programs. The 315 U.S. counties comprise 70.8 percent of the total covered workers in the United States.

22. Annual data: Employment status of the population

[Numbers in thousands]

Employment status	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Civilian noninstitutional population	192,805	194,838	196,814	198,584	200,591	203,133	205,220	207,753	209,699	211,864
Civilian labor force	128,105	129,200	131,056	132,304	133,943	136,297	137,673	139,368	140,863	141,815
Labor force participation rate	66.4	66.3	66.6	66.6	66.8	67.1	67.1	67.1	67.2	66.9
Employed	118,492	120,259	123,060	124,900	126,708	129,558	131,463	133,488	135,208	135,073
Employment-population ratio	61.5	61.7	62.5	62.9	63.2	63.8	64.1	64.3	64.5	63.8
Agriculture	3,247	3,115	3,409	3,440	3,443	3,399	3,378	3,281	3,305	3,144
Nonagricultural industries	115,245	117,144	119,651	121,460	123,264	126,159	128,085	130,207	131,903	131,929
Unemployed	9,613	8,940	7,996	7,404	7,236	6,739	6,210	5,880	5,655	6,742
Unemployment rate	7.5	6.9	6.1	5.6	5.4	4.9	4.5	4.2	4.0	4.8
Not in the labor force	64,700	65,638	65,758	66,280	66,647	66,837	67,547	68,385	68,836	70,050

23. Annual data: Employment levels by industry

[In thousands]

Industry	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Total employment	108,601	110,713	114,163	117,191	119,608	122,690	125,865	128,916	131,759	132,213
Private sector	89,956	91,872	95,036	97,885	100,189	103,133	106,042	108,709	111,079	111,341
Goods-producing	23,231	23,352	23,908	24,265	24,493	24,962	25,414	25,507	25,709	25,122
Mining	635	610	601	581	580	596	590	539	543	563
Construction	4,492	4,668	4,986	5,160	5,418	5,691	6,020	6,415	6,698	6,861
Manufacturing	18,104	18,075	18,321	18,524	18,495	18,675	18,805	18,552	18,469	17,698
Service-producing	85,370	87,361	90,256	92,925	95,115	97,727	100,451	103,409	106,050	107,092
Transportation and public utilities	5,718	5,811	5,984	6,132	6,253	6,408	6,611	6,834	7,019	7,070
Wholesale trade	5,997	5,981	6,162	6,378	6,482	6,648	6,800	6,911	7,024	7,014
Retail trade	19,356	19,773	20,507	21,187	21,597	21,966	22,295	22,848	23,307	23,488
Finance, insurance, and real estate	6,602	6,757	6,896	6,806	6,911	7,109	7,389	7,555	7,560	7,624
Services	29,052	30,197	31,579	33,117	34,454	36,040	37,533	39,055	40,460	41,024
Government	18,645	18,841	19,128	19,305	19,419	19,557	19,823	20,206	20,681	20,873
Federal	2,969	2,915	2,870	2,822	2,757	2,699	2,686	2,669	2,777	2,616
State	4,408	4,488	4,576	4,635	4,606	4,582	4,612	4,709	4,785	4,880
Local	11,267	11,438	11,682	11,849	12,056	12,276	12,525	12,829	13,119	13,277

NOTE: See "Notes on the data" for a description of the most recent benchmark revision.

24. Annual data: Average hours and earnings of production or nonsupervisory workers on nonfarm payrolls, by industry

Industry	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Private sector:										
Average weekly hours	34.4	34.5	34.7	34.5	34.4	34.6	34.6	34.5	34.5	34.2
Average hourly earnings (in dollars)	10.57	10.83	11.12	11.43	11.82	12.28	12.78	13.24	13.75	14.33
Average weekly earnings (in dollars)	363.61	373.64	385.86	394.34	406.61	424.89	442.19	456.78	474.38	490.09
Mining:										
Average weekly hours	43.9	44.3	44.8	44.7	45.3	45.4	43.9	43.2	43.1	43.4
Average hourly earnings (in dollars)	14.54	14.60	14.88	15.30	15.62	16.15	16.91	17.05	17.24	17.65
Average weekly earnings (in dollars)	638.31	646.78	666.62	683.91	707.59	733.21	742.35	736.56	743.04	766.01
Construction:										
Average weekly hours	38.0	38.5	38.9	38.9	39.0	39.0	38.9	39.1	39.3	39.2
Average hourly earnings (in dollars)	14.15	14.38	14.73	15.09	15.47	16.04	16.61	17.19	17.88	18.33
Average weekly earnings (in dollars)	537.70	553.63	573.00	587.00	603.33	625.56	646.13	672.13	702.68	718.54
Manufacturing:										
Average weekly hours	41.0	41.4	42.0	41.6	41.6	42.0	41.7	41.7	41.6	40.7
Average hourly earnings (in dollars)	11.46	11.74	12.07	12.37	12.77	13.17	13.49	13.90	14.38	14.84
Average weekly earnings (in dollars)	469.86	486.04	506.94	514.59	531.23	553.14	562.53	579.63	598.21	603.99
Transportation and public utilities:										
Average weekly hours	38.3	39.3	39.7	39.4	39.6	39.7	39.5	38.7	38.6	38.1
Average hourly earnings (in dollars)	13.43	13.55	13.78	14.13	14.45	14.92	15.31	15.69	16.22	16.89
Average weekly earnings (in dollars)	514.37	532.52	547.07	556.72	572.22	592.32	604.75	607.20	626.09	643.51
Wholesale trade:										
Average weekly hours	38.2	38.2	38.4	38.3	38.3	38.4	38.3	38.3	38.5	38.2
Average hourly earnings (in dollars)	11.39	11.74	12.06	12.43	12.87	13.45	14.07	14.59	15.20	15.80
Average weekly earnings (in dollars)	435.10	448.47	463.10	476.07	492.92	516.48	538.88	558.80	585.20	603.56
Retail trade:										
Average weekly hours	28.8	28.8	28.9	28.8	28.8	28.9	29.0	29.0	28.9	28.8
Average hourly earnings (in dollars)	7.12	7.29	7.49	7.69	7.99	8.33	8.74	9.09	9.46	9.82
Average weekly earnings (in dollars)	205.06	209.95	216.46	221.47	230.11	240.74	253.46	263.61	273.39	282.82
Finance, insurance, and real estate:										
Average weekly hours	35.8	35.8	35.8	35.9	35.9	36.1	36.4	36.2	36.3	36.3
Average hourly earnings (in dollars)	10.82	11.35	11.83	12.32	12.80	13.34	14.07	14.62	15.07	15.83
Average weekly earnings (in dollars)	387.36	406.33	423.51	442.29	459.52	481.57	512.15	529.24	547.04	574.63
Services:										
Average weekly hours	32.5	32.5	32.5	32.4	32.4	32.6	32.6	32.6	32.7	32.7
Average hourly earnings (in dollars)	10.54	10.78	11.04	11.39	11.79	12.28	12.84	13.37	13.91	14.61
Average weekly earnings (in dollars)	342.55	350.35	358.80	369.04	382.00	400.33	418.58	435.86	454.86	477.75

25. Employment Cost Index, compensation,[1] by occupation and industry group

[June 1989 = 100]

Series	2000				2001				2002	Percent change	
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	3 months ended	12 months ended
										Mar. 2002	
Civilian workers[2]	146.5	148.0	149.5	150.6	152.5	153.8	155.6	156.8	158.4	1.0	3.9
Workers, by occupational group:											
White-collar workers	148.4	149.9	151.5	152.5	154.4	156.0	157.7	158.9	160.5	1.0	4.0
Professional specialty and technical	146.7	148.3	150.0	151.3	153.2	154.3	156.7	157.5	158.5	.6	3.5
Executive, administrative, and managerial	150.5	151.9	153.7	154.6	156.6	158.6	159.6	161.2	163.7	1.6	4.5
Administrative support, including clerical	148.6	150.1	151.8	152.8	155.3	156.8	158.8	160.0	162.0	1.3	4.3
Blue-collar workers	142.7	144.1	145.6	146.5	148.2	149.3	151.1	152.0	153.7	1.1	3.7
Service occupations	146.0	147.1	148.5	150.0	152.0	153.3	155.0	156.9	158.4	1.0	4.2
Workers, by industry division:											
Goods-producing	144.9	146.6	148.0	148.8	150.7	152.2	153.3	154.4	156.3	1.2	3.7
Manufacturing	146.0	147.5	148.7	149.3	151.3	152.6	153.3	154.6	156.6	1.3	3.5
Service-producing	147.1	148.4	150.1	151.1	153.0	155.4	156.4	157.6	159.1	1.0	4.0
Services	148.0	149.3	151.2	152.4	154.3	155.4	158.1	159.0	160.2	.8	3.8
Health services	145.9	147.5	149.0	150.7	152.5	154.6	156.7	158.3	160.5	1.4	5.2
Hospitals	146.3	147.7	149.5	151.3	153.2	155.6	158.2	160.0	162.3	1.4	5.9
Educational services	146.5	146.8	149.7	150.6	151.7	152.2	156.1	156.6	157.1	.3	3.6
Public administration[3]	145.7	146.1	146.9	148.3	150.6	151.9	153.8	155.2	156.5	.8	3.9
Nonmanufacturing	146.6	148.0	149.6	150.7	152.6	154.0	156.0	157.2	158.7	1.0	4.0
Private industry workers	146.8	148.5	149.9	150.9	153.0	154.5	155.9	157.2	158.9	1.1	3.9
Excluding sales occupations	146.5	148.2	149.8	150.9	153.0	154.4	156.0	160.9	159.0	1.1	3.9
Workers, by occupational group:											
White-collar workers	149.3	151.1	152.6	153.6	155.7	157.4	158.7	160.1	161.9	1.1	4.0
Excluding sales occupations	149.4	151.3	152.9	154.1	156.5	158.1	159.6	160.9	162.8	1.2	4.0
Professional specialty and technical occupations	148.4	150.7	152.2	153.7	156.3	157.5	159.2	160.3	161.5	.7	3.3
Executive, administrative, and managerial occupations	151.1	152.7	154.4	155.3	157.3	159.4	160.2	161.8	164.4	1.6	4.5
Sales occupations	148.9	150.3	151.2	151.4	152.3	154.5	155.0	156.7	157.7	.6	3.5
Administrative support occupations, including clerical	149.0	150.6	152.3	153.4	156.1	157.7	159.5	160.8	162.8	1.2	4.3
Blue-collar workers	142.6	144.1	145.5	146.4	148.2	149.3	151.0	151.9	153.6	1.1	3.6
Precision production, craft, and repair occupations	142.3	144.1	145.8	146.7	148.7	149.7	151.8	152.5	153.7	.8	3.4
Machine operators, assemblers, and inspectors	144.0	145.0	146.0	146.8	148.3	149.1	150.4	151.5	153.[illegible]	1.4	3.6
Transportation and material moving occupations	137.5	138.6	139.9	141.1	142.6	143.9	145.6	146.3	148.7	1.6	4.3
Handlers, equipment cleaners, helpers, and laborers	146.4	148.1	149.4	150.4	152.2	153.4	154.9	156.5	158.7	1.4	4.3
Service occupations	143.9	145.4	146.6	148.1	150.0	151.3	[illegible]	154.8	156.4	1.0	4.3
Production and nonsupervisory occupations[4]	145.3	146.9	148.4	149.5	151.4	152.7	154.3	155.5	157.1	1.0	3.8
Workers, by industry division:											
Goods-producing	144.8	146.6	147.9	148.8	150.7	152.1	153.1	154.4	156.2	1.2	3.6
Excluding sales occupations	144.2	145.9	147.2	148.2	150.1	151.5	152.5	153.7	155.5	1.2	3.6
White-collar occupations	148.1	150.1	151.3	151.9	154.5	156.5	156.8	158.1	160.1	1.3	3.6
Excluding sales occupations	146.5	148.4	149.6	150.5	153.0	155.0	155.3	156.5	158.4	1.2	3.5
Blue-collar occupations	142.8	144.4	145.8	146.8	148.2	149.3	150.8	151.9	153.6	1.1	3.6
Construction	140.8	143.2	145.1	146.7	148.2	150.3	151.7	153.0	154.1	.7	4.0
Manufacturing	146.0	147.5	148.7	149.3	151.3	152.6	152.2	154.6	156.6	1.3	3.5
White-collar occupations	148.2	150.2	151.4	151.5	154.2	156.0	156.0	156.9	159.1	1.4	3.2
Excluding sales occupations	146.2	148.2	149.3	149.7	152.2	154.0	153.8	154.5	156.7	1.3	3.0
Blue-collar occupations	144.4	145.6	146.7	147.8	149.1	150.0	151.3	152.7	154.6	1.2	3.7
Durables	146.5	148.3	149.4	150.1	151.8	153.1	154.0	155.3	156.9	1.0	3.4
Nondurables	144.9	146.0	147.5	147.7	150.4	151.6	152.0	153.2	156.0	1.8	3.7
Service-producing	147.4	149.1	150.6	151.7	153.8	155.3	156.9	158.2	159.9	1.1	4.0
Excluding sales occupations	147.7	149.4	151.1	152.2	154.6	156.0	157.8	159.0	160.9	1.2	4.1
White-collar occupations	149.3	151.0	152.6	153.7	155.8	157.4	159.0	160.3	162.1	1.1	4.0
Excluding sales occupations	150.3	152.1	153.9	155.1	157.5	159.1	160.9	162.2	164.1	1.2	4.2
Blue-collar occupations	141.8	143.1	144.5	145.3	147.7	148.7	150.9	151.0	153.2	1.2	3.7
Service occupations	143.6	145.1	146.3	147.9	149.6	150.8	152.2	154.2	155.9	1.1	4.2
Transportation and public utilities	143.9	145.7	147.4	148.3	150.5	152.4	153.5	155.5	157.3	1.2	4.5
Transportation	140.4	141.8	142.8	143.9	145.4	146.9	148.2	151.1	152.5	.9	4.9
Public utilities	148.6	150.9	153.5	154.1	157.3	159.8	160.7	161.5	163.9	1.5	4.2
Communications	148.4	150.9	153.9	154.7	158.3	161.1	162.8	163.4	166.0	1.6	4.9
Electric, gas, and sanitary services	148.9	151.0	152.9	153.4	156.0	158.1	158.1	159.1	161.3	1.4	3.4
Wholesale and retail trade	145.6	147.3	148.3	149.4	151.0	152.6	153.7	155.5	156.5	.6	3.6
Excluding sales occupations	146.4	148.1	149.6	150.6	152.6	153.9	155.4	–	–	–	–
Wholesale trade	150.0	151.8	152.1	154.4	155.1	157.8	158.6	159.5	161.9	1.5	4.4
Excluding sales occupations	149.6	151.1	152.7	154.9	156.9	158.5	160.0	160.6	162.3	1.1	3.4
Retail trade	143.2	144.8	146.2	146.6	148.7	149.7	150.9	153.2	153.5	.2	3.2
General merchandise stores	139.7	141.0	142.2	144.4	147.3	149.4	149.7	150.9	152.4	1.0	–
Food stores	140.1	142.5	143.4	144.5	146.1	148.2	149.7	151.7	152.6	.8	4.7

See footnotes at end of table.

25. Continued—Employment Cost Index, compensation,[1] by occupation and industry group

[June 1989 = 100]

Series	2000				2001				2002	Percent change	
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	3 months ended	12 months ended
										Mar. 2002	
Finance, insurance, and real estate	152.0	153.1	155.2	155.7	157.9	158.5	160.9	161.3	165.2	2.4	4.6
Excluding sales occupations	154.2	155.5	157.4	158.4	161.2	163.1	164.7	165.0	169.8	2.9	5.3
Banking, savings and loan, and other credit agencies	162.7	164.2	165.8	166.5	170.8	172.7	175.4	174.5	182.1	4.5	6.6
Insurance	149.9	151.3	154.8	155.2	157.6	159.3	159.9	161.3	164.0	1.7	4.1
Services	149.4	151.2	152.9	154.1	156.5	157.8	160.0	161.0	162.6	1.0	3.9
Business services	154.2	156.3	157.5	158.4	160.5	163.0	165.2	166.2	166.3	.1	3.6
Health services	145.8	147.5	149.0	150.6	152.7	154.7	156.8	158.4	160.6	1.4	5.2
Hospitals	145.8	147.5	149.2	151.1	153.5	155.9	158.4	160.3	162.8	1.6	6.1
Educational services	154.0	154.9	158.8	159.9	162.3	162.6	166.4	167.6	168.5	.5	3.8
Colleges and universities	154.6	155.5	158.6	159.2	162.2	162.6	166.2	167.5	168.1	.4	3.6
Nonmanufacturing	146.7	148.4	150.0	151.1	153.1	154.7	156.3	157.6	159.3	1.1	4.0
White-collar workers	149.2	151.0	152.6	153.7	155.8	157.5	159.0	160.5	162.2	1.1	4.1
Excluding sales occupations	150.2	152.0	153.8	155.1	157.5	159.1	160.9	162.3	164.2	1.2	4.3
Blue-collar occupations	140.6	142.3	143.9	144.8	146.9	148.1	150.2	150.6	152.2	1.1	3.6
Service occupations	143.5	145.1	146.3	147.8	149.5	150.7	152.1	154.1	155.9	1.2	4.3
State and local government workers	145.5	145.9	147.8	148.9	150.3	151.2	154.3	155.2	156.1	.6	3.9
Workers, by occupational group:											
White-collar workers	144.9	145.3	147.3	148.3	149.5	150.4	153.7	154.4	155.2	.5	3.8
Professional specialty and technical	144.1	144.5	146.6	147.4	148.4	149.2	152.8	153.2	153.6	.3	3.5
Executive, administrative, and managerial	147.0	147.2	149.2	150.7	152.4	153.7	156.4	157.6	159.5	1.2	4.7
Administrative support, including clerical	145.9	146.5	148.3	149.4	150.7	151.6	154.2	155.6	156.9	.8	4.1
Blue-collar workers	143.7	144.2	145.9	147.2	148.6	149.0	151.5	153.2	154.0	.5	3.6
Workers, by industry division:											
Services	145.2	145.5	148.0	148.9	149.9	150.6	154.4	154.9	155.5	.4	3.7
Services excluding schools[4]	145.2	145.8	147.6	148.8	150.1	151.9	154.5	156.1	157.9	1.2	5.2
Health services	147.3	147.9	150.0	151.3	152.1	154.4	157.1	158.5	160.4	1.1	5.5
Hospitals	147.9	148.4	150.7	152.0	152.2	154.7	157.4	159.1	160.7	1.0	5.6
Educational services	145.0	145.2	147.9	148.7	149.6	150.1	154.1	154.5	154.8	.2	3.5
Schools	145.3	145.5	148.2	149.0	149.9	150.5	154.4	154.8	155.1	.2	3.5
Elementary and secondary	144.5	144.7	147.3	148.1	148.5	149.0	152.8	153.1	153.4	.2	3.3
Colleges and universities	147.4	147.6	150.5	151.7	153.7	154.3	153.8	159.6	160.0	.3	4.1
Public administration[3]	145.7	146.1	146.9	148.2	150.6	151.9	151.9	155.2	156.5	.8	3.9

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[1] Cost (cents per hour worked) measured in the Employment Cost Index consists of wages, salaries, and employer cost of employee benefits.

[2] Consists of private industry workers (excluding farm and household workers) and State and local government (excluding Federal Government) workers.

[3] Consists of legislative, judicial, administrative, and regulatory activities.

[4] This series has the same industry and occupational coverage as the Hourly Earnings index, which was discontinued in January 1989.

[5] Includes, for example, library, social, and health services.

26. Employment Cost Index, wages and salaries, by occupation and industry group

[June 1989 = 100]

Series	2000				2001				2002	Percent change	
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	3 months ended	12 months ended
										Mar. 2002	
Civilian workers[1]	144.0	145.4	147.0	147.9	149.5	150.8	152.3	153.4	154.8	0.9	3.5
Workers, by occupational group:											
White-collar workers	146.2	147.6	149.2	150.2	151.7	153.1	154.5	155.6	157.0	.9	3.5
Professional specialty and technical	144.9	146.4	148.3	149.6	151.1	152.-	154.2	155.1	155.6	.3	3.0
Executive, admintrative, and managerial	148.6	149.9	151.6	152.4	154.0	155.8	156.7	158.1	160.7	1.6	4.4
Administrative support, including clerical	145.5	146.9	148.5	149.6	151.6	152.7	154.6	155.7	157.3	1.0	3.8
Blue-collar workers	139.2	140.6	142.0	142.9	144.7	146.0	147.6	148.5	149.7	.8	3.5
Service occupations	143.0	144.0	145.7	147.1	148.6	149.7	151.2	153.0	154.2	.8	3.8
Workers, by industry division:											
Goods-producing	141.3	143.0	144.3	145.3	147.0	147.6	149.5	150.5	151.8	.9	3.3
Manufacturing	142.9	144.4	145.7	146.5	148.5	150.0	150.7	151.7	153.1	.9	3.1
Service-producing	145.0	146.3	148.0	148.9	150.5	151.7	153.4	154.5	155.9	.9	3.6
Services	146.6	147.9	149.9	151.0	152.6	153.6	156.2	157.1	158.1	.6	3.6
Health services	143.8	145.3	146.7	148.3	149.8	151.8	153.7	155.5	157.3	1.2	5.0
Hospitals	142.6	143.8	145.6	147.3	148.8	151.2	15.5	155.5	157.2	1.1	5.6
Educational services	145.3	145.6	148.9	149.6	150.5	151.0	154.6	155.1	155.3	.1	3.2
Public administration[2]	142.5	142.9	144.6	146.1	147.6	148.7	150.3	151.6	152.5	.6	3.3
Nonmanufacturing	144.2	145.5	147.2	148.1	149.7	149.7	152.6	153.8	155.0	.8	3.5
Private industry workers	143.9	145.4	146.8	147.7	149.4	150.9	152.1	153.3	154.7	.9	3.5
Excluding sales occupations	143.5	145.1	146.5	147.6	149.5	150.8	152.2	153.3	154.9	1.0	3.6
Workers, by occupational group:											
White-collar workers	146.6	148.3	149.7	150.6	152.3	153.8	154.8	156.1	157.7	1.0	3.5
Excluding sales occupations	146.7	148.5	149.9	151.1	153.0	154.4	155.7	156.9	158.6	1.1	3.7
Professional specialty and technical occupations	145.1	147.3	148.6	150.2	152.1	153.2	154.8	155.9	156.7	.5	3.0
Executive, admintrative, and managerial occupations	149.2	150.7	152.3	153.0	154.7	156.5	157.2	158.6	161.3	1.7	4.3
Sales occupations	146.7	147.9	149.0	148.7	149.2	151.5	151.2	152.6	153.6	.7	2.9
Administrative support occupations, including clerical	146.0	147.5	149.1	150.1	152.3	153.6	155.3	156.5	158.2	1.1	3.9
Blue-collar workers	139.1	140.5	141.9	142.8	144.6	145.9	147.5	148.3	149.6	.9	3.5
Precision production, craft, and repair occupations	138.9	140.6	142.0	142.8	144.6	145.7	147.7	148.4	149.2	.5	3.2
Machine operators, assemblers, and inspectors	140.7	141.6	142.9	143.7	145.6	146.9	148.1	149.0	150.5	1.0	3.4
Transportation and material moving occupations	134.1	135.2	136.5	137.6	139.5	140.7	142.1	142.8	144.8	1.4	3.8
Handlers, equipment cleaners, helpers, and laborers	141.8	143.6	145.0	146.2	148.0	149.8	151.0	152.4	154.2	1.2	4.2
Service occupations	141.0	142.5	143.5	144.9	146.4	147.5	148.7	150.6	152.0	.9	3.8
Production and nonsupervisory occupations[3]	142.1	143.7	145.0	146.0	147.7	149.0	150.3	151.5	152.7	.8	3.4
Workers, by industry division:											
Goods-producing	141.3	143.0	144.3	145.2	147.0	148.6	149.5	150.5	151.7	.8	3.2
Excluding sales occupations	140.5	142.1	143.4	144.6	146.3	147.8	148.7	149.7	150.9	.8	3.1
White-collar occupations	145.0	146.8	147.9	148.7	150.5	152.3	152.6	153.6	155.0	.9	3.0
Excluding sales occupations	143.2	144.9	146.0	147.2	148.9	150.5	150.8	151.7	152.9	.8	2.7
Blue-collar occupations	139.0	140.5	142.0	143.1	144.7	146.1	147.4	148.4	149.6	.8	3.4
Construction	136.0	138.0	139.4	140.7	142.1	143.9	145.1	146.3	147.0	.5	3.4
Manufacturing	142.9	144.4	145.7	146.5	148.5	150.0	150.7	151.7	153.1	.9	3.1
White-collar occupations	145.8	147.7	148.7	149.2	151.1	152.7	152.8	153.3	154.9	1.0	2.5
Excluding sales occupations	143.7	145.6	146.6	147.5	149.9	150.5	150.5	151.0	152.3	.9	2.1
Blue-collar occupations	140.8	142.0	143.4	144.6	146.4	147.8	149.1	150.3	151.7	.9	3.6
Durables	143.0	144.7	146.1	147.3	149.0	150.5	151.5	151.7	153.9	.9	3.3
Nondurables	142.7	143.9	145.0	145.4	147.5	149.0	149.3	153.9	151.9	1.1	3.0
Service-producing	145.0	146.5	147.9	148.9	150.5	151.9	153.2	151.9	156.1	1.0	3.7
Excluding sales occupations	145.3	146.9	148.3	149.4	151.3	152.6	154.2	156.1	157.2	1.1	3.9
White-collar occupations	146.9	148.5	150.0	150.9	152.5	154.0	155.2	157.2	158.2	1.1	3.7
Excluding sales occupations	147.8	149.6	151.2	152.3	154.3	155.6	157.2	158.2	160.4	1.1	4.0
Blue-collar occupations	139.1	140.3	141.6	142.2	144.3	145.3	147.5	148.1	149.4	.9	3.5
Service occupations	141.1	142.5	143.5	144.8	146.1	147.2	148.4	149.4	151.6	.9	3.8
Transportation and public utilities	138.5	140.0	141.3	142.3	143.7	145.7	146.7	149.2	150.5	.9	4.7
Transportation	134.9	136.2	137.4	138.6	139.8	141.6	142.6	145.7	147.4	1.2	5.4
Public utilities	143.2	144.9	146.4	147.1	148.7	151.0	152.0	153.6	154.3	.5	3.8
Communications	143.4	145.0	146.7	147.4	149.2	151.8	153.3	155.2	155.3	.1	4.1
Electric, gas, and sanitary services	143.0	144.7	145.9	146.6	143.1	149.9	150.4	151.7	153.0	.9	3.3
Wholesale and retail trade	143.8	145.5	146.4	147.4	148.4	150.1	130.6	152.1	153.0	.6	3.1
Excluding sales occupations	145.2	146.8	148.2	149.0	150.7	151.9	153.1	–	–	–	–
Wholesale trade	147.4	149.4	149.6	151.6	151.6	154.5	154.1	154.8	157.2	1.6	3.7
Excluding sales occupations	147.9	149.7	151.3	153.2	154.9	156.5	157.4	157.9	159.4	.9	2.9
Retail trade	142.1	143.5	144.8	145.2	146.9	147.8	148.8	150.7	150.9	.1	2.7
General merchandise stores	137.8	138.5	139.7	142.2	143.8	145.5	145.7	146.5	147.9	1.0	2.9
Food stores	136.7	139.5	140.2	141.6	143.3	144.5	145.7	146.7	148.0	.9	3.3

See footnotes at end of table.

26. Continued—Employment Cost Index, wages and salaries, by occupation and industry group

[June 1989 = 100]

Series	2000				2001				2002	Percent change	
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	3 months ended Mar. 2002	12 months ended Mar. 2002
Finance, insurance, and real estate	148.7	149.5	151.7	151.7	153.9	154.6	155.8	156.0	160.3	2.8	4.2
Excluding sales occupations	150.2	151.5	153.3	154.1	156.6	157.6	159.1	159.1	164.5	3.4	5.0
Banking, savings and loan, and other credit agencies	162.0	163.3	165.0	165.7	169.4	170.8	173.2	171.7	181.2	5.5	7.0
Insurance	145.5	146.6	150.7	150.8	152.4	153.3	153.6	155.0	157.1	1.4	3.1
Services	147.4	149.1	150.6	151.8	153.8	155.0	157.1	158.2	159.5	.8	3.7
Business services	152.0	154.1	155.3	156.0	158.2	160.8	162.8	163.7	164.0	.2	3.7
Health services	143.5	145.3	146.6	148.1	149.8	151.8	153.6	155.4	157.3	1.2	5.0
Hospitals	141.8	143.3	144.9	146.8	148.5	151.0	153.3	155.4	157.1	1.1	5.8
Educational services	148.9	149.6	153.4	154.3	155.4	156.1	159.6	160.5	161.2	.4	3.7
Colleges and universities	148.9	149.4	152.5	152.9	154.1	155.0	158.4	159.6	159.9	.2	3.8
Nonmanufacturing	143.9	145.5	146.9	147.9	149.5	150.9	152.2	153.5	155.0	1.0	3.7
White-collar workers	146.5	148.2	149.6	150.6	152.3	153.8	155.0	156.4	158.0	1.0	3.7
Excluding sales occupations	147.4	149.1	150.7	151.9	153.9	155.3	156.9	158.3	160.1	1.1	4.0
Blue-collar occupations	137.4	138.9	140.3	140.9	142.8	143.9	145.8	146.4	147.5	.8	3.3
Service occupations	140.9	142.4	143.4	144.7	146.0	147.1	148.2	150.1	151.4	.9	3.7
State and local government workers	144.3	144.7	147.2	148.3	150.2	151.2	154.3	155.2	156.1	.5	3.4
Workers, by occupational group:											
White-collar workers	144.1	144.5	147.1	148.0	149.0	149.8	152.7	153.3	153.9	.4	3.3
Professional specialty and technical	144.3	144.7	147.4	148.2	149.1	149.8	153.0	153.4	153.6	.1	3.0
Executive, administrative, and managerial	144.9	145.1	147.3	148.8	150.1	151.5	153.9	155.1	156.6	1.0	4.3
Administrative support, including clerical	142.4	143.0	145.0	146.2	147.0	147.6	149.8	150.9	151.9	.7	3.3
Blue-collar workers	141.5	142.1	143.9	145.1	146.0	146.5	149.1	150.8	151.6	.5	3.8
Workers, by industry division:											
Services	144.6	144.9	147.9	148.7	149.5	150.2	153.7	154.2	154.6	.3	3.4
Services excluding schools[4]	144.3	144.8	146.7	147.9	149.1	150.7	153.2	154.9	156.7	1.2	5.1
Health services	145.3	145.7	147.7	149.3	149.9	151.9	154.2	155.8	157.8	1.3	5.3
Hospitals	145.3	145.6	147.7	149.2	149.5	151.8	154.2	155.7	157.7	1.3	5.5
Educational services	144.5	144.8	148.0	148.7	149.5	150.0	153.6	154.0	154.2	.1	3.1
Schools	144.7	144.9	148.1	148.9	149.7	150.2	153.8	154.1	154.3	.1	3.1
Elementary and secondary	144.5	144.6	147.9	148.5	149.0	149.5	152.8	153.1	153.4	.2	3.0
Colleges and universities	144.9	145.6	148.3	149.5	151.4	151.8	156.5	156.7	156.8	.1	3.6
Public administration[2]	142.5	142.9	144.6	146.1	147.6	148.7	150.3	151.6	152.5	.6	3.3

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[1] Consists of private industry workers (excluding farm and household workers) and State and local government (excluding Federal Government) workers.

[2] Consists of legislative, judicial, administrative, and regulatory activities.

[3] This series has the same industry and occupational coverage as the Hourly Earnings index, which was discontinued in January 1989.

[4] Includes, for example, library, social, and health services.

27. Employment Cost Index, benefits, private industry workers by occupation and industry group

[June 1989 = 100]

Series	2000				2001				2002	Percent change	
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	3 months ended Mar. 2002	12 months ended Mar. 2002
Private industry workers	153.8	155.7	157.5	158.6	161.5	163.2	165.2	166.7	169.3	1.6	4.8
Workers, by occupational group:											
White-collar workers	156.3	158.5	160.4	161.5	165.2	167.4	169.5	171.2	173.5	1.3	5.0
Blue-collar workers	150.0	151.6	153.1	154.1	155.7	156.7	158.3	159.2	162.2	1.9	4.2
Workers, by industry division:											
Goods-producing	152.3	154.2	155.7	156.2	158.5	159.6	160.8	162.6	165.8	2.0	4.6
Service-producing	154.0	156.0	157.9	159.4	162.6	164.6	167.1	168.4	170.7	1.4	5.0
Manufacturing	152.3	153.9	154.9	154.8	157.1	157.9	158.5	160.4	163.7	2.1	4.2
Nonmanufacturing	154.0	156.1	158.1	159.7	162.9	164.9	167.4	168.6	171.1	1.4	5.0

28. Employment Cost Index, private nonfarm workers by bargaining status, region, and area size

[June 1989 = 100]

Series	2000				2001				2002	Percent change	
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	3 months ended	12 months ended
										Mar. 2002	
COMPENSATION											
Workers, by bargaining status[1]											
Union	143.0	144.4	146.1	146.9	147.9	149.5	151.0	153.1	154.8	1.1	4.7
Goods-producing	143.3	144.8	146.8	147.3	147.9	149.3	150.6	151.6	153.4	1.1	3.7
Service-producing	142.5	143.9	145.2	146.4	147.6	149.5	151.2	154.2	156.0	1.2	5.7
Manufacturing	144.5	145.4	147.1	147.4	147.9	148.8	149.9	151.4	153.4	1.3	3.7
Nonmanufacturing	141.7	143.4	145.0	146.2	147.3	149.4	151.1	153.5	155.0	1.0	5.2
Nonunion	147.4	149.1	150.6	151.6	153.8	155.3	156.7	157.8	159.6	1.1	3.8
Goods-producing	145.4	147.2	148.4	149.3	151.6	153.1	154.0	155.3	157.2	1.2	3.7
Service-producing	148.0	149.6	151.2	152.3	154.4	155.9	157.5	158.6	160.3	1.1	3.8
Manufacturing	146.5	148.2	149.2	149.9	152.4	153.7	154.4	155.5	157.6	1.4	3.4
Nonmanufacturing	147.4	149.1	150.7	151.8	153.9	155.4	157.0	158.2	159.9	1.1	3.9
Workers, by region[1]											
Northeast	146.3	147.6	149.3	150.3	151.6	153.7	155.2	156.3	158.3	1.3	4.4
South	145.0	146.7	147.6	148.6	151.1	152.3	153.5	154.6	156.2	1.0	3.4
Midwest (formerly North Central)	148.9	150.7	152.2	153.3	154.8	156.0	157.4	158.6	161.1	1.6	4.1
West	147.0	148.8	150.8	151.8	154.3	156.0	157.6	159.4	160.4	.6	4.0
Workers, by area size[1]											
Metropolitan areas	146.9	148.6	150.1	151.0	153.1	154.6	156.0	157.4	159.1	1.1	3.9
Other areas	146.0	147.7	148.8	150.3	152.1	153.7	154.8	155.6	157.5	1.2	3.6
WAGES AND SALARIES											
Workers, by bargaining status[1]											
Union	137.2	138.5	140.0	141.2	142.1	143.7	145.1	147.4	148.4	.7	4.4
Goods-producing	137.2	138.4	140.2	141.3	142.4	144.2	145.3	146.3	147.2	.6	3.4
Service-producing	137.6	138.9	140.1	141.5	142.2	143.7	145.4	148.9	150.0	.7	5.5
Manufacturing	138.8	139.7	141.4	142.6	143.9	145.5	146.7	148.0	149.0	.7	3.5
Nonmanufacturing	136.4	137.8	139.2	140.4	141.1	142.7	144.3	147.1	148.1	.7	5.0
Nonunion	145.1	146.7	148.1	149.0	150.8	152.2	153.4	154.4	155.9	1.0	3.4
Goods-producing	142.9	144.7	145.8	146.8	148.8	150.3	151.1	152.1	153.5	.9	3.2
Service-producing	145.8	147.3	148.7	149.6	151.4	152.7	154.1	155.1	156.7	1.0	3.5
Manufacturing	144.4	146.1	147.2	148.0	150.1	151.6	152.2	153.1	154.7	1.0	3.1
Nonmanufacturing	145.0	146.6	148.0	148.9	150.7	152.0	153.3	154.4	155.9	1.0	3.5
Workers, by region[1]											
Northeast	142.3	143.7	145.3	146.0	147.3	149.2	150.6	151.7	153.5	1.2	4.2
South	143.0	144.6	145.3	146.3	148.3	149.3	150.2	151.2	152.5	.9	2.8
Midwest (formerly North Central)	145.3	147.1	148.6	149.6	150.9	152.3	153.6	154.7	157.1	1.6	4.1
West	144.7	146.3	148.2	149.2	151.3	152.9	154.3	156.0	156.4	.3	3.4
Workers, by area size[1]											
Metropolitan areas	144.1	145.7	147.1	148.0	149.8	151.2	152.4	153.7	155.1	.9	3.5
Other areas	142.2	143.7	144.7	146.0	147.4	148.8	149.7	150.5	151.7	.8	2.9

[1] The indexes are calculated differently from those for the occupation and industry groups. For a detailed description of the index calculation, see the *Monthly Labor Review* Technical Note, "Estimation procedures for the Employment Cost Index," May 1982.

29. Percent of full-time employees participating in employer-provided benefit plans, and in selected features within plans, medium and large private establishments, selected years, 1980–97

Item	1980	1982	1984	1986	1988	1989	1991	1993	1995	1997
Scope of survey (in 000's)	21,352	21,043	21,013	21,303	31,059	32,428	31,163	28,728	33,374	38,409
Number of employees (in 000's):										
With medical care	20,711	20,412	20,383	20,238	27,953	29,834	25,865	23,519	25,546	29,340
With life insurance	20,498	20,201	20,172	20,451	28,574	30,482	29,293	26,175	29,078	33,495
With defined benefit plan	17,936	17,676	17,231	16,190	19,567	20,430	18,386	16,015	17,417	19,202
Time-off plans										
Participants with:										
Paid lunch time	10	9	9	10	11	10	8	9	–	–
Average minutes per day	–	25	26	27	29	26	30	29	–	–
Paid rest time	75	76	73	72	72	71	67	68	–	–
Average minutes per day	–	25	26	26	26	26	28	26	–	–
Paid funeral leave	–	–	–	88	85	84	80	83	80	81
Average days per occurrence	–	–	–	3.2	3.2	3.3	3.3	3.0	3.3	3.7
Paid holidays	99	99	99	99	96	97	92	91	89	89
Average days per year	10.1	10.0	9.8	10.0	9.4	9.2	10.2	9.4	9.1	9.3
Paid personal leave	20	24	23	25	24	22	21	21	22	20
Average days per year	–	3.8	3.6	3.7	3.3	3.1	3.3	3.1	3.3	3.5
Paid vacations	100	99	99	100	98	97	96	97	96	95
Paid sick leave [1]	62	67	67	70	69	68	67	65	58	56
Unpaid maternity leave	–	–	–	–	33	37	37	60	–	–
Unpaid paternity leave	–	–	–	–	16	18	26	53	–	–
Unpaid family leave	–	–	–	–	–	–	–	–	84	93
Insurance plans										
Participants in medical care plans	97	97	97	95	90	92	83	82	77	76
Percent of participants with coverage for:										
Home health care	–	–	46	66	76	75	81	86	78	85
Extended care facilities	58	62	62	70	79	80	80	82	73	78
Physical exam	–	–	8	18	28	28	30	42	56	63
Percent of participants with employee contribution required for:										
Self coverage	26	27	36	43	44	47	51	61	67	69
Average monthly contribution	–	–	$11.93	$12.80	$19.29	$25.31	$26.60	$31.55	$33.92	$39.14
Family coverage	46	51	58	63	64	66	69	76	78	80
Average monthly contribution	–	–	$35.93	$41.40	$60.07	$72.10	$96.97	$107.42	$118.33	$130.07
Participants in life insurance plans	96	96	96	96	92	94	94	91	87	87
Percent of participants with:										
Accidental death and dismemberment insurance	69	72	74	72	78	71	71	76	77	74
Survivor income benefits	–	–	–	10	8	7	6	5	7	6
Retiree protection available	–	64	64	59	49	42	44	41	37	33
Participants in long-term disability insurance plans	40	43	47	48	42	45	40	41	42	43
Participants in sickness and accident insurance plans	54	51	51	49	46	43	45	44	–	–
Participants in short-term disability plans [1]	–	–	–	–	–	–	–	–	53	55
Retirement plans										
Participants in defined benefit pension plans	84	84	82	76	63	63	59	56	52	50
Percent of participants with:										
Normal retirement prior to age 65	55	58	63	64	59	62	55	52	52	52
Early retirement available	98	97	97	98	98	97	98	95	96	95
Ad hoc pension increase in last 5 years	–	–	47	35	26	22	7	6	4	10
Terminal earnings formula	53	52	54	57	55	64	56	61	58	56
Benefit coordinated with Social Security	45	45	56	62	62	63	54	48	51	49
Participants in defined contribution plans	–	–	–	60	45	48	48	49	55	57
Participants in plans with tax-deferred savings arrangements	–	–	–	33	36	41	44	43	54	55
Other benefits										
Employees eligible for:										
Flexible benefits plans	–	–	–	2	5	9	10	12	12	13
Reimbursement accounts [2]	–	–	–	5	12	23	36	52	38	32
Premium conversion plans	–	–	–	–	–	–	–	–	5	7

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[1] The definitions for paid sick leave and short-term disability (previously sickness and accident insurance) were changed for the 1995 survey. Paid sick leave now includes only plans that specify either a maximum number of days per year or unlimited days. Short-terms disability now includes all insured, self-insured, and State-mandated plans available on a per-disability basis, as well as the unfunded per-disability plans previously reported as sick leave. Sickness and accident insurance, reported in years prior to this survey, included only insured, self-insured, and State-mandated plans providing per-disability benefits at less than full pay.

[2] Prior to 1995, reimbursement accounts included premium conversion plans, which specifically allow medical plan participants to pay required plan premiums with pretax dollars. Also, reimbursement accounts that were part of flexible benefit plans were tabulated separately.

NOTE: Dash indicates data not available.

30. Percent of full-time employees participating in employer-provided benefit plans, and in selected features within plans, small private establishments and State and local governments, 1987, 1990, 1992, 1994, and 1996

Item	Small private establishments				State and local governments			
	1990	1992	1994	1996	1987	1990	1992	1994
Scope of survey (in 000's)	32,466	34,360	35,910	39,816	10,321	12,972	12,466	12,907
Number of employees (in 000's):								
With medical care	22,402	24,396	23,536	25,599	9,599	12,064	11,219	11,192
With life insurance	20,778	21,990	21,955	24,635	8,773	11,415	11,095	11,194
With defined benefit plan	6,493	7,559	5,480	5,883	9,599	11,675	10,845	11,708
Time-off plans								
Participants with:								
Paid lunch time	8	9	–	–	17	11	10	–
Average minutes per day	37	37	–	–	34	36	34	–
Paid rest time	48	49	–	–	58	56	53	–
Average minutes per day	27	26	–	–	29	29	29	–
Paid funeral leave	47	50	50	51	56	63	65	62
Average days per occurrence	2.9	3.0	3.1	3.0	3.7	3.7	3.7	3.7
Paid holidays	84	82	82	80	81	74	75	73
Average days per year[1]	9.5	9.2	7.5	7.6	10.9	13.6	14.2	11.5
Paid personal leave	11	12	13	14	38	39	38	38
Average days per year	2.8	2.6	2.6	3.0	2.7	2.9	2.9	3.0
Paid vacations	88	88	88	86	72	67	67	66
Paid sick leave[2]	47	53	50	50	97	95	95	94
Unpaid leave	17	18	–	–	57	51	59	–
Unpaid paternity leave	8	7	–	–	30	33	44	–
Unpaid family leave	–	–	47	48	–	–	–	93
Insurance plans								
Participants in medical care plans	69	71	66	64	93	93	90	87
Percent of participants with coverage for:								
Home health care	79	80	–	–	76	82	87	84
Extended care facilities	83	84	–	–	78	79	84	81
Physical exam	26	28	–	–	36	36	47	55
Percent of participants with employee contribution required for:								
Self coverage	42	47	52	52	35	38	43	47
Average monthly contribution	$25.13	$36.51	$40.97	$42.63	$15.74	$25.53	$28.97	$30.20
Family coverage	67	73	76	75	71	65	72	71
Average monthly contribution	$109.34	$150.54	$159.63	$181.53	$71.89	$117.59	$139.23	$149.70
Participants in life insurance plans	64	64	61	62	85	88	89	87
Percent of participants with:								
Accidental death and dismemberment insurance	78	76	79	77	67	67	74	64
Survivor income benefits	1	1	2	1	1	1	1	2
Retiree protection available	19	25	20	13	55	45	46	46
Participants in long-term disability insurance plans	19	23	20	22	31	27	28	30
Participants in sickness and accident insurance plans	6	26	26	–	14	21	22	21
Participants in short-term disability plans[2]	–	–	–	29	–	–	–	–
Retirement plans								
Participants in defined benefit pension plans	20	22	15	15	93	90	87	91
Percent of participants with:								
Normal retirement prior to age 65	54	50	–	47	92	89	92	92
Early retirement available	95	95	–	92	90	88	89	87
Ad hoc pension increase in last 5 years	7	4	–	–	33	16	10	13
Terminal earnings formula	58	54	–	53	100	100	100	99
Benefit coordinated with Social Security	49	46	–	44	18	8	10	49
Participants in defined contribution plans	31	33	34	38	9	9	9	9
Participants in plans with tax-deferred savings arrangements	17	24	23	28	28	45	45	24
Other benefits								
Employees eligible for:								
Flexible benefits plans	1	2	3	4	5	5	5	5
Reimbursement accounts[3]	8	14	19	12	5	31	50	64
Premium conversion plans	–	–	–	7	–	–	–	–

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[1] Methods used to calculate the average number of paid holidays were revised in 1994 to count partial days more precisely. Average holidays for 1994 are not comparable with those reported in 1990 and 1992.

[2] The definitions for paid sick leave and short-term disability (previously sickness and accident insurance) were changed for the 1996 survey. Paid sick leave now includes only plans that specify either a maximum number of days per year or unlimited days. Short-term disability now includes all insured, self-insured, and State-mandated plans available on a per-disability basis, as well as the unfunded per-disability plans previously reported as sick leave. Sickness and accident insurance, reported in years prior to this survey, included only insured, self-insured, and State-mandated plans providing per-disability benefits at less than full pay.

[3] Prior to 1996, reimbursement accounts included premium conversion plans, which specifically allow medical plan participants to pay required plan premiums with pretax dollars. Also, reimbursement accounts that were part of flexible benefit plans were tabulated separately.

NOTE: Dash indicates data not available.

31. Work stoppages involving 1,000 workers or more

Measure	Annual totals		2000	2001											
	2000	2001	Dec.	Jan.[p]	Feb.[p]	Mar.[p]	Apr.[p]	May[p]	June[p]	July[p]	Aug.[p]	Sept.[p]	Oct.[p]	Nov.[p]	Dec.[p]
Number of stoppages:															
Beginning in period	39	29	0	1	1	3	4	7	3	2	3	2	1	0	2
In effect during period	40	30	3	2	1	4	5	8	5	3	4	3	4	1	2
Workers involved:															
Beginning in period (in thousands)	394	99	8.7	2.0	1.2	7.8	19.4	22.1	4.7	2.2	5.8	3.0	24.9	.0	6.0
In effect during period (in thousands)	397	102	10.3	4.7	1.2	9.0	20.7	23.4	9.0	3.3	6.9	4.1	29.0	1.6	6.0
Days idle:															
Number (in thousands)	20,419	1,151	58.9	37.1	3.6	33.4	230.5	201.6	73.2	62.1	71.5	55.7	316.4	11.2	55.0
Percent of estimated working time[1]	.06	.00	(2)	(2)	(2)	(2)	.01	.01	(2)	(2)	(2)	(2)	.01	(2)	(2)

[1] Agricultural and government employees are included in the total employed and total working time; private household, forestry, and fishery employees are excluded. An explanation of the measurement of idleness as a percentage of the total time worked is found in " 'Total economy' measures of strike idleness," *Monthly Labor Review*, October 1968, pp. 54–56.

[2] Less than 0.005.

[p] = preliminary.

NOTE: Dash indicates data not available.

32. Consumer Price Indexes for All Urban Consumers and for Urban Wage Earners and Clerical Workers: U.S. city average, by expenditure category and commodity or service group

[1982–84 = 100, unless otherwise indicated]

Series	Annual average		2001										2002		
	2000	2001	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
CONSUMER PRICE INDEX FOR ALL URBAN CONSUMERS															
All items	172.2	177.1	176.2	176.9	177.7	178.0	177.5	177.5	178.3	177.7	177.4	176.7	177.1	177.8	178.8
All items (1967 = 100)	515.8	530.4	528.0	529.9	532.2	533.3	531.6	531.8	534.0	532.2	531.3	5292.0	530.6	532.7	535.5
Food and beverages	168.4	173.6	172.2	172.4	172.9	173.4	174.0	174.4	174.6	175.3	175.2	175.2	176.2	176.4	176.6
Food	167.8	173.1	171.7	171.9	172.5	173.0	173.5	173.9	174.1	174.9	174.6	174.7	175.8	175.9	176.1
Food at home	167.9	173.4	172.0	172.2	172.8	173.3	173.9	174.2	174.3	175.2	174.7	174.7	176.2	176.0	176.3
Cereals and bakery products	188.3	193.8	191.9	192.5	193.2	194.2	194.9	195.9	195.1	195.2	194.9	195.3	196.7	197.6	197.6
Meats, poultry, fish, and eggs	154.5	161.3	160.1	160.7	160.8	161.7	162.3	162.4	162.4	163.5	162.7	162.0	162.1	161.8	162.8
Dairy and related products[1]	160.7	167.1	163.2	163.4	164.7	166.9	168.3	168.9	169.4	170.8	171.2	170.8	169.9	170.1	169.4
Fruits and vegetables	204.6	212.2	211.5	213.3	213.1	211.8	210.7	208.8	212.1	213.5	212.9	214.4	224.8	223.3	225.8
Nonalcoholic beverages and beverage materials	137.8	139.2	139.5	138.9	138.1	138.6	138.9	140.0	139.2	139.9	139.5	18.5	139.5	140.0	140.1
Other foods at home	155.6	159.6	158.6	157.6	159.6	159.5	160.4	161.0	160.2	160.9	160.3	160.9	161.3	160.4	159.9
Sugar and sweets	154.0	155.7	155.7	154.0	155.8	155.7	156.1	156.1	156.6	156.4	154.9	156.1	158.4	158.5	157.2
Fats and oils	147.4	155.7	153.1	151.5	154.7	156.7	157.8	158.5	158.5	159.5	155.6	156.9	158.3	157.2	156.4
Other foods	172.2	176.0	175.1	174.4	176.4	175.7	176.8	177.6	176.2	177.0	177.6	177.9	177.4	176.3	175.9
Other miscellaneous foods[1,2]	107.5	108.9	108.4	108.5	108.8	107.7	109.6	109.5	108.9	108.9	110.6	108.5	108.9	108.0	107.8
Food away from home[1]	169.0	173.9	172.3	172.7	173.1	173.6	174.1	174.7	175.1	175.6	175.8	176.0	176.4	177.0	177.1
Other food away from home[1,2]	109.0	113.4	111.6	111.8	112.4	112.6	113.8	114.3	115.3	115.4	115.5	115.5	115.5	115.8	116.3
Alcoholic beverages	174.7	179.3	177.8	178.1	178.5	179.1	179.7	180.0	180.4	180.8	181.2	180.9	181.8	182.6	182.5
Housing	169.6	176.4	175.4	175.4	175.9	177.3	177.6	178.0	177.4	176.7	176.9	176.9	177.6	178.5	179.1
Shelter	193.4	200.6	198.9	199.2	199.6	200.7	201.4	202.4	202.0	202.4	202.9	203.2	204.5	206.1	207.0
Rent of primary residence	183.9	192.1	189.6	190.2	191.0	191.6	192.3	193.1	193.9	194.7	195.5	196.4	197.0	197.7	198.2
Lodging away from home	117.5	118.6	124.2	121.8	120.0	123.7	124.0	125.2	116.8	114.5	111.6	108.0	113.1	119.3	121.9
Owners' equivalent rent of primary residence[3]	198.7	206.3	203.6	204.2	204.9	205.7	206.3	207.3	208.1	209.0	210.1	210.9	211.6	212.2	212.8
Tenants' and household insurance[1,2]	103.7	106.2	105.4	105.5	106.8	107.0	106.6	106.6	106.7	106.9	106.9	106.3	106.4	106.8	106.8
Fuels and utilities	137.9	150.2	150.8	149.7	151.3	155.7	154.8	152.7	150.6	144.6	143.5	142.2	141.5	140.0	140.2
Fuels	122.8	135.4	136.3	135.1	136.8	141.6	140.5	138.0	135.7	129.1	127.8	126.2	125.3	123.7	123.8
Fuel oil and other fuels	129.7	129.3	138.1	134.4	131.9	129.6	123.8	122.1	125.3	121.5	118.3	112.7	112.9	112.3	112.8
Gas (piped) and electricity	128.0	142.4	142.6	141.6	143.8	149.4	148.6	146.0	143.1	135.9	134.7	133.5	132.4	130.6	130.7
Household furnishings and operations	128.2	129.1	129.1	129.1	128.9	129.2	129.2	129.1	129.4	129.0	129.1	128.9	128.7	128.6	128.7
Apparel	129.6	127.3	132.2	131.9	129.8	126.3	122.6	122.6	126.8	129.5	128.0	123.7	120.4	123.5	128.2
Men's and boys' apparel	129.7	125.7	127.5	128.2	129.1	125.8	122.5	121.4	123.7	127.5	127.4	122.8	120.8	122.0	125.2
Women's and girls' apparel	121.5	119.3	127.8	127.0	122.3	117.5	111.6	112.1	120.3	122.1	119.4	114.8	109.7	115.3	121.3
Infants' and toddlers' apparel[1]	130.6	129.2	1316.0	131.4	130.6	127.3	124.5	126.3	129.3	131.5	132.4	128.5	125.0	127.2	129.9
Footwear	123.8	123.0	125.2	124.9	124.4	122.1	121.3	121.9	122.9	124.9	123.7	120.6	117.1	119.5	123.5
Transportation	153.3	154.3	153.9	156.1	159.2	158.3	154.4	153.3	155.5	152.3	150.2	148.5	148.6	148.4	150.5
Private transportation	149.1	150.0	149.7	152.1	155.3	154.0	149.9	148.8	151.2	148.1	146.1	144.3	144.4	144.1	146.3
New and used motor vehicles[2]	100.8	101.3	101.9	101.8	101.4	101.1	100.8	100.5	100.2	100.6	101.3	101.6	101.0	100.1	99.6
New vehicles	142.8	142.1	142.8	142.7	142.3	141.7	141.2	140.3	140.2	141.0	142.6	143.5	142.7	141.2	140.7
Used cars and trucks[1]	155.8	158.7	159.9	159.7	159.1	158.9	158.3	158.0	157.3	157.8	157.4	157.2	155.6	153.9	152.1
Motor fuel	129.3	124.7	124.1	133.6	146.8	142.0	125.6	121.9	131.4	116.3	104.5	96.1	97.9	96.2	107.7
Gasoline (all types)	128.6	124.0	123.3	132.8	146.0	141.3	124.9	121.2	130.7	115.6	103.8	95.4	97.2	97.6	107.1
Motor vehicle parts and equipment	101.5	104.8	104.7	104.2	104.4	104.4	105.1	104.9	105.2	105.5	105.8	105.8	106.2	106.1	106.5
Motor vehicle maintenance and repair	177.3	183.5	181.7	181.9	182.5	182.7	183.4	184.0	185.1	186.0	186.4	186.4	187.1	188.0	188.5
Public transportation	209.6	210.6	210.0	208.3	209.3	216.3	216.1	213.7	212.7	209.1	205.1	204.8	205.8	207.3	207.9
Medical care	260.8	272.8	270.0	270.8	271.4	272.5	273.1	274.4	275.0	275.9	276.7	277.3	279.6	281.0	282.0
Medical care commodities	238.1	247.6	244.9	245.7	246.6	248.1	248.5	249.1	249.6	250.2	250.6	251.6	252.6	253.7	254.1
Medical care services	266.0	278.8	275.9	276.8	277.3	278.3	278.9	280.5	281.0	282.0	283.0	283.5	286.2	287.7	288.9
Professional services	237.7	246.5	244.8	245.6	245.8	246.5	246.8	247.7	247.9	248.4	248.8	248.9	250.6	251.4	251.9
Hospital and related services	317.3	338.3	332.8	333.6	335.1	336.6	337.9	341.2	342.6	344.8	347.1	348.3	353.1	356.4	359.4
Recreation[2]	103.3	104.9	104.3	105.0	105.0	104.8	105.0	105.1	105.2	105.3	105.5	105.3	105.7	105.9	106.1
Video and audio[1,2]	101.0	101.5	101.6	101.7	101.6	101.3	101.7	101.7	101.3	101.3	101.4	101.2	102.1	102.9	102.9
Education and communication[2]	102.5	105.2	104.3	104.1	104.0	104.4	104.8	105.8	106.6	107.1	107.0	106.9	107.2	107.3	106.6
Education[2]	112.5	118.5	116.1	116.1	116.4	116.9	117.2	119.5	121.7	122.2	122.3	122.0	122.6	123.2	123.3
Educational books and supplies	279.9	295.9	290.8	290.8	290.7	293.9	295.1	298.0	305.4	307.2	304.7	294.7	303.0	314.4	314.2
Tuition, other school fees, and child care	324.0	341.1	334.0	334.1	335.0	336.2	337.2	343.9	350.0	351.5	352.0	352.2	353.2	353.9	354.1
Communication[1,2]	93.6	93.3	93.7	93.3	92.9	93.1	93.6	93.5	93.1	93.6	93.3	93.4	93.4	93.1	92.0
Information and information processing[1,2]	92.8	92.3	92.7	32.3	91.8	92.1	92.5	92.4	92.0	92.5	92.2	92.3	92.2	92.0	90.8
Telephone services[1,2]	98.5	99.3	99.4	99.0	98.7	99.0	99.6	99.6	99.2	99.9	99.6	99.6	100.3	100.3	99.1
Information and information processing other than telephone services[1,4]	25.9	21.3	22.5	22.1	21.7	21.4	21.3	20.7	20.3	20.2	20.0	19.8	19.4	19.0	18.8
Personal computers and peripheral equipment[1,2]	41.1	29.5	32.4	31.7	30.4	29.8	29.3	27.8	26.7	26.4	25.8	25.3	24.6	23.8	23.1
Other goods and services	271.1	282.6	277.7	277.7	281.3	281.2	285.8	283.3	287.8	285.6	289.2	286.4	287.2	290.2	288.5
Tobacco and smoking products	394.9	425.2	407.7	424.2	418.7	421.0	441.2	424.6	444.0	429.9	446.7	431.7	432.8	449.3	433.4
Personal care[1]	165.6	170.5	169.1	169.6	169.5	170.0	170.7	171.2	171.9	172.3	172.6	172.6	173.2	173.7	174.1
Personal care products[1]	153.7	155.1	155.7	155.8	153.2	154.6	155.1	154.7	155.5	155.4	155.4	155.4	155.2	155.5	155.1
Personal care services[1]	178.1	184.3	182.2	183.4	184.1	184.1	184.8	185.2	185.5	185.9	186.8	186.4	186.3	186.4	187.3

See footnotes at end of table.

32. Continued—Consumer Price Indexes for All Urban Consumers and for Urban Wage Earners and Clerical Workers: U.S. city average, by expenditure category and commodity or service group

[1982–84 = 100, unless otherwise indicated]

Series	Annual average		2001										2002		
	2000	2001	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Miscellaneous personal services	252.3	263.1	259.5	260.2	261.0	261.8	263.2	265.5	266.4	267.3	268.0	268.5	270.4	271.8	272.9
Commodity and service group:															
Commodities	149.2	150.7	150.7	151.9	152.9	152.1	150.4	149.8	151.5	150.5	149.5	147.9	147.8	148.1	149.4
Food and beverages	168.4	173.6	172.2	172.4	172.9	173.4	174.0	174.4	174.6	175.3	175.2	175.2	176.2	176.4	176.6
Commodities less food and beverages	137.7	137.2	138.0	136.7	140.8	139.4	136.5	135.4	138.0	136.1	134.6	132.3	131.6	132.1	133.7
Nondurables less food and beverages	147.4	147.1	147.9	151.0	153.5	151.3	146.3	144.8	149.6	146.0	142.8	138.4	137.9	139.6	143.8
Apparel	129.6	127.3	132.2	131.9	129.8	126.3	122.6	122.6	126.8	129.5	128.0	123.7	120.4	123.5	128.2
Nondurables less food, beverages, and apparel	162.5	163.4	161.9	167.0	172.0	170.4	164.5	162.1	167.5	160.4	156.2	151.6	152.6	153.6	157.3
Durables	125.4	124.6	125.5	125.4	124.9	124.5	124.2	123.6	123.4	123.6	124.2	124.3	123.6	122.7	122.1
Services	195.3	203.4	201.8	201.9	202.5	204.0	204.5	205.2	204.9	204.7	205.1	205.3	206.3	207.3	208.0
Rent of shelter[3]	201.3	208.9	207.2	207.4	207.8	209.0	209.7	210.8	210.3	210.8	211.3	211.7	213.0	214.7	215.6
Transporatation services	196.1	201.9	200.2	200.1	200.4	202.0	202.6	202.7	202.8	203.4	204.2	204.5	205.2	206.5	207.3
Other services	229.9	238.0	235.4	236.2	236.4	236.7	237.7	239.4	240.6	241.4	241.9	241.9	242.9	243.5	243.6
Special indexes:															
All items less food	173.0	177.8	177.1	177.8	178.6	179.0	178.2	178.2	179.0	178.2	177.8	177.0	177.4	178.2	179.2
All items less shelter	165.7	169.7	169.2	170.1	170.9	171.0	170.0	169.7	170.9	169.9	169.3	168.2	168.4	168.7	169.7
All items less medical care	167.3	171.9	171.2	171.8	172.8	172.9	172.3	172.3	173.0	172.4	172.0	171.3	171.7	172.4	173.3
Commodities less food	139.2	138.9	139.6	141.2	142.4	141.0	138.2	137.2	139.7	137.6	136.4	134.1	133.5	133.9	135.6
Nondurables less food	149.1	149.1	149.8	152.8	155.1	153.1	148.3	146.9	151.5	148.1	145.1	140.9	140.5	142.2	145.9
Nondurables less food and apparel	162.9	164.1	162.7	167.4	172.0	170.6	165.2	163.0	168.0	161.5	157.7	153.4	154.5	155.4	158.7
Nondurables	158.2	160.6	160.3	162.0	163.6	162.7	160.3	159.7	162.3	160.8	159.1	156.8	157.0	158.0	160.2
Services less rent of shelter[3]	202.9	212.3	210.6	210.6	211.4	213.3	213.7	214.0	213.9	213.0	213.3	213.2	213.9	214.3	214.8
Services less medical care services	188.9	196.6	195.1	195.2	195.7	197.2	197.8	198.4	198.1	197.8	198.2	198.3	199.2	200.2	200.8
Energy	124.6	129.3	129.5	133.1	140.1	140.5	132.4	129.4	132.5	122.1	116.0	111.4	111.7	111.0	115.6
All items less energy	178.6	183.5	182.6	182.9	182.9	183.3	183.6	184.1	184.5	185.1	185.4	185.2	185.7	186.5	187.1
All items less food and energy	181.3	186.1	185.3	185.6	185.5	185.9	186.2	186.6	187.1	187.6	188.1	187.8	188.2	189.2	189.8
Commodities less food and energy	144.9	145.3	146.2	146.6	145.7	144.9	144.4	143.8	145.2	145.6	146.0	144.7	143.7	144.2	144.6
Energy commodities	129.5	125.2	125.4	133.8	145.6	141.1	125.6	122.0	131.0	116.9	105.8	97.6	99.3	99.5	108.6
Services less energy	202.1	209.6	207.7	208.0	208.4	209.4	210.1	211.2	211.2	211.7	212.3	212.6	213.8	215.1	215.9
CONSUMER PRICE INDEX FOR URBAN WAGE EARNERS AND CLERICAL WORKERS															
All items	163.2	173.5	172.6	173.5	174.4	174.6	173.8	173.8	174.8	174.0	173.7	172.9	173.2	173.7	174.7
All items (1967 = 100)	486.2	516.8	514.2	516.7	519.4	520.0	517.8	517.6	520.6	518.3	517.3	515.0	515.0	517.5	520.2
Food and beverages	163.8	173.0	171.6	171.9	172.3	172.9	173.4	173.8	174.0	174.8	174.5	174.6	175.7	175.8	176.1
Food	163.4	172.5	171.1	171.4	171.9	172.4	173.0	173.4	173.5	174.3	174.1	174.1	175.2	175.3	175.6
Food at home	163.0	172.4	171.1	171.3	171.8	172.4	173.0	173.3	173.4	174.3	173.7	173.7	175.3	175.1	175.5
Cereals and bakery products	184.7	193.6	191.7	192.2	192.9	193.9	194.5	195.6	194.8	195.1	194.7	195.1	196.7	197.5	197.0
Meats, poultry, fish, and eggs	147.6	161.2	160.0	160.7	160.6	161.4	162.1	162.0	162.3	163.2	162.6	161.8	162.0	161.6	162.7
Dairy and related products[1]	159.4	167.1	163.1	163.5	164.7	166.9	168.3	168.9	169.4	170.8	171.2	170.6	169.7	170.0	169.2
Fruits and vegetables	201.8	210.8	209.8	211.7	211.5	210.5	209.5	208.0	211.0	212.2	211.5	212.8	223.2	222.2	224.9
Nonalcoholic beverages and beverage materials	133.2	138.4	138.8	138.2	137.2	137.8	138.0	139.3	138.4	139.2	138.7	137.7	138.8	139.5	139.7
Other foods at home	152.8	159.1	158.2	157.1	159.1	159.1	160.0	160.5	159.8	160.4	159.7	160.5	161.0	160.1	159.6
Sugar and sweets	152.2	155.6	155.6	153.7	155.8	155.5	156.0	156.1	156.2	156.2	154.7	155.9	158.5	158.5	157.1
Fats and oils	147.9	155.4	153.0	151.4	154.3	156.4	157.4	158.0	158.1	159.1	155.1	156.5	158.0	157.0	156.3
Other foods	168.8	176.3	175.4	174.6	176.5	176.0	177.2	177.9	176.5	177.3	177.8	178.3	177.9	176.8	176.5
Other miscellaneous foods[1,2]	104.6	109.1	108.5	108.4	108.7	108.0	109.9	109.7	109.2	109.5	110.8	109.0	109.3	108.5	108.3
Food away from home[1]	165.0	173.8	172.3	172.7	173.1	173.5	174.0	174.7	175.0	175.6	175.8	176.0	176.4	176.9	177.0
Other food away from home[1,2]	105.1	113.6	111.8	112.0	112.5	112.8	114.0	114.4	115.6	115.7	115.8	115.8	115.8	116.0	116.8
Alcoholic beverages	168.8	178.8	177.2	177.6	178.0	178.4	179.2	179.7	180.1	180.5	180.8	180.5	181.4	182.1	182.2
Housing	160.0	172.1	171.0	171.0	171.7	173.0	173.3	173.5	173.2	172.5	172.8	172.9	173.4	173.9	174.4
Shelter	181.6	194.5	192.6	192.9	193.5	194.4	195.0	195.9	196.0	196.6	197.2	197.7	198.7	199.8	200.6
Rent of primary residence	177.1	191.5	189.0	189.6	190.4	191.0	191.7	192.4	193.3	194.0	194.9	195.7	196.3	197.0	197.5
Lodging away from home[2]	122.2	118.4	123.8	121.2	119.9	123.2	123.7	124.4	116.8	114.8	111.8	108.8	113.2	119.4	122.2
Owners' equivalent rent of primary residence[3]	175.7	187.6	185.2	185.7	186.3	187.0	187.5	188.5	189.2	190.0	190.9	191.7	192.3	192.9	193.3
Tenants' and household insurance[1,2]	101.6	106.4	105.6	105.8	106.9	107.2	106.7	106.8	106.8	107.0	107.1	106.3	106.4	106.8	106.9
Fuels and utilities	128.7	149.5	149.9	148.8	150.8	155.2	154.4	152.2	150.1	144.0	142.8	141.5	140.8	139.4	139.6
Fuels	113.0	134.2	134.8	133.6	135.7	140.5	139.5	137.0	134.7	127.9	126.7	125.2	124.2	122.7	122.8
Fuel oil and other fuels	91.7	129.2	138.0	133.9	131.5	129.2	123.1	121.5	125.3	121.4	118.5	112.7	113.0	112.4	112.7
Gas (piped) and electricity	120.4	141.5	141.5	140.4	142.9	148.5	147.8	145.2	142.2	135.0	133.7	132.5	131.4	129.7	129.8
Household furnishings and operations	124.7	125.8	125.9	126.0	125.7	125.9	125.8	125.7	126.0	125.5	125.6	125.4	125.0	124.9	124.9
Apparel	130.1	126.1	130.6	130.5	128.5	125.2	121.9	121.6	125.6	128.3	127.2	123.0	119.6	122.4	126.9
Men's and boys' apparel	131.2	125.8	127.6	128.3	129.2	126.3	122.9	121.6	123.7	127.3	127.3	122.7	121.0	122.2	125.2
Women's and girls' apparel	121.3	117.3	125.2	124.7	120.2	115.6	110.2	110.1	118.3	120.2	118.0	113.5	108.5	113.8	119.7
Infants' and toddlers' apparel[1]	130.3	130.9	133.3	133.2	132.0	128.6	126.2	128.3	131.1	133.5	134.3	130.3	126.7	128.4	131.7
Footwear	126.2	123.1	125.2	125.2	124.5	122.1	121.4	122.0	123.0	124.9	124.2	121.0	117.7	119.3	122.8
Transportation	143.4	153.6	153.3	155.8	159.2	157.9	153.4	152.5	155.1	151.4	149.2	147.4	147.5	147.1	149.2
Private transportation	140.7	150.8	150.5	153.2	156.6	155.1	150.4	149.5	152.3	148.6	146.4	144.5	144.6	144.2	146.4
New and used motor vehicles[2]	100.4	101.9	102.5	102.4	102.0	101.7	101.4	101.0	100.7	101.1	101.7	102.0	101.3	100.3	99.7

See footnotes at end of table.

32. Continued—Consumer Price Indexes for All Urban Consumers and for Urban Wage Earners and Clerical Workers: U.S. city average, by expenditure category and commodity or service group

[1982–84 = 100, unless otherwise indicated]

Series	Annual average		2001										2002		
	2000	2001	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
New vehicles	143.9	143.2	143.8	143.8	143.4	142.7	142.3	141.4	141.3	142.1	143.8	144.7	143.8	142.3	141.8
Used cars and trucks[1]	157.1	159.6	161.1	160.9	160.2	160.0	159.3	159.0	158.2	158.7	158.3	158.1	156.5	154.8	153.0
Motor fuel	129.5	124.9	124.1	134.0	147.4	142.1	124.9	122.0	132.4	116.2	104.4	96.3	98.2	98.5	108.0
Gasoline (all types)	128.8	124.2	123.4	133.3	146.7	141.1	124.2	121.3	131.7	115.5	103.8	95.7	97.8	97.9	107.5
Motor vehicle parts and equipment	100.9	104.0	104.0	103.5	103.6	103.6	104.3	104.1	104.4	104.7	105.0	104.9	105.3	105.3	105.7
Motor vehicle maintenance and repair	178.8	185.1	183.3	183.4	184.1	184.4	185.0	185.6	186.7	187.5	187.8	187.9	188.6	189.5	189.9
Public transportation	203.4	204.9	204.2	202.7	203.5	209.5	209.5	207.7	207.0	203.7	200.4	200.1	201.0	202.5	203.0
Medical care	259.9	271.8	269.1	269.9	270.4	271.5	272.0	273.4	273.9	274.9	275.6	276.2	278.5	279.8	280.9
Medical care commodities	233.6	242.7	240.2	241.0	241.7	243.2	243.6	244.1	244.6	245.2	245.6	246.7	247.6	248.5	249.0
Medical care services	265.9	278.5	276.7	278.5	277.0	278.0	278.5	280.2	280.7	281.7	282.6	283.0	285.7	287.2	288.4
Professional services	239.6	248.7	247.0	247.8	248.0	248.7	249.0	249.9	250.1	250.5	250.9	251.0	252.8	253.6	254.0
Hospital and related services	313.2	333.8	328.3	329.1	330.6	332.0	333.5	337.0	338.3	340.5	342.7	343.6	348.2	351.4	354.3
Recreation[2]	102.4	103.6	103.0	103.7	103.7	103.5	103.7	103.9	103.8	103.8	104.0	103.8	104.2	104.5	104.6
Video and audio[1,2]	100.7	100.9	101.0	101.2	101.1	100.7	101.1	101.0	100.6	100.6	100.7	100.5	101.4	102.2	102.1
Education and communication[2]	102.7	105.3	104.4	104.2	104.1	104.5	104.9	105.8	106.5	107.1	106.9	106.9	107.1	107.2	106.5
Education[2]	112.8	118.7	116.3	116.4	116.7	117.2	117.6	119.6	121.7	122.3	122.3	122.1	122.7	123.3	123.3
Educational books and supplies	283.3	299.9	294.7	294.7	294.5	298.2	299.3	302.2	309.8	311.7	308.9	297.3	305.2	315.2	315.1
Tuition, other school fees, and child care	318.2	334.7	327.9	328.2	329.1	330.3	331.3	337.3	342.9	344.4	344.9	345.2	346.2	347.0	347.2
Communication[1,2]	94.6	94.5	94.8	94.4	94.0	94.3	94.8	94.7	94.3	94.9	94.5	94.6	94.7	94.5	93.3
Information and information processing[1,2]	94.1	93.8	94.1	93.8	93.4	93.6	94.0	94.0	93.6	94.2	93.8	93.9	94.0	93.7	92.6
Telephone services[1,2]	98.7	99.4	99.5	99.2	98.8	99.2	99.7	99.8	99.4	100.1	99.7	99.9	100.4	100.5	99.3
Information and information processing other than telephone services[1,4]	26.8	22.1	23.3	22.8	22.4	22.2	22.0	21.5	21.2	21.0	20.8	20.6	20.1	19.7	19.5
Personal computers and peripheral equipment[1,2]	40.5	29.1	31.8	31.1	29.9	29.4	28.7	27.4	26.6	26.1	25.5	25.0	24.3	23.5	22.8
Other goods and services	278.5	289.5	283.5	288.2	286.8	287.9	293.8	290.0	295.5	292.4	297.3	293.3	294.0	298.3	295.2
Tobacco and smoking products	395.2	426.1	408.5	424.8	419.8	421.6	441.9	425.6	444.7	430.9	448.3	432.9	433.5	450.7	434.1
Personal care[1]	165.5	170.3	169.0	169.4	169.3	169.9	170.6	170.9	171.4	171.9	172.3	172.3	172.7	173.2	173.7
Personal care products[1]	154.2	155.7	155.9	156.0	153.8	155.4	155.9	155.5	156.1	156.1	156.1	156.0	155.9	156.3	156.0
Personal care services[1]	178.6	184.9	182.8	183.9	184.7	184.8	185.4	185.9	186.1	186.5	187.4	187.1	187.0	187.1	188.0
Miscellaneous personal services	251.9	262.8	258.3	260.0	260.7	261.6	263.2	264.9	265.6	266.8	267.5	268.0	269.8	271.4	272.5
Commodity and service group:															
Commodities	149.8	151.4	151.4	152.8	153.9	153.0	151.2	150.5	152.5	151.2	150.1	148.4	148.3	148.6	149.8
Food and beverages	167.7	173.0	171.6	171.9	172.3	172.8	173.4	173.8	174.0	174.8	174.5	174.6	175.7	175.8	176.1
Commodities less food and beverages	139.0	138.7	139.3	141.2	142.6	141.1	138.0	136.9	139.8	137.4	135.9	133.4	132.7	133.1	134.7
Nondurables less food and beverages	149.1	149.0	149.3	153.1	156.2	153.6	148.2	146.5	152.0	147.4	144.2	139.4	138.9	140.7	144.8
Apparel	128.3	126.1	130.6	130.5	128.5	125.2	121.9	121.6	125.6	128.3	127.2	123.0	119.6	122.4	126.9
Nondurables less food, beverages, and apparel	165.3	166.3	164.4	170.5	176.3	174.1	167.3	164.8	171.4	162.7	158.2	153.1	154.2	155.4	159.4
Durables	125.8	125.3	126.2	126.0	125.5	125.2	124.8	124.3	124.1	124.3	124.8	124.9	124.1	123.1	122.3
Services	191.6	199.6	197.8	198.0	198.7	200.1	200.6	201.2	201.1	201.0	201.4	201.7	202.5	203.3	203.9
Rent of shelter[3]	180.5	187.3	185.5	185.8	186.3	187.2	187.8	188.7	188.7	189.3	189.9	190.4	191.4	192.5	193.2
Transporatation services	192.9	199.1	197.2	197.2	197.6	198.9	199.5	199.8	200.1	200.9	202.3	202.6	203.4	204.7	205.6
Other services	225.9	233.7	231.2	231.9	232.2	232.6	233.6	235.1	235.9	236.8	237.2	237.3	238.3	239.0	238.8
Special indexes:															
All items less food	169.1	173.6	172.8	173.8	174.7	174.9	173.9	173.7	174.9	173.8	173.4	172.5	172.7	173.3	174.3
All items less shelter	163.6	167.6	167.0	168.0	169.1	169.0	167.8	167.5	168.8	167.6	166.9	165.7	165.8	166.1	167.1
All items less medical care	164.7	169.1	168.2	169.1	170.0	170.2	169.4	169.3	170.3	169.5	169.1	168.3	168.5	169.0	170.0
Commodities less food	140.4	140.2	140.8	142.7	144.1	142.6	139.6	138.5	141.3	139.0	137.6	135.1	134.5	134.8	136.5
Nondurables less food	150.7	150.8	151.1	154.7	157.6	155.3	150.1	148.5	153.8	149.4	146.4	141.8	141.8	143.1	147.0
Nondurables less food and apparel	165.4	166.7	164.9	170.5	175.9	173.9	167.7	165.4	171.5	163.5	159.5	154.7	154.7	157.0	160.7
Nondurables	158.9	161.4	160.9	163.0	164.8	163.8	161.2	160.5	163.5	161.5	159.7	157.3	157.5	158.5	160.8
Services less rent of shelter[3]	180.1	188.5	187.0	187.0	187.8	189.6	189.9	190.1	189.9	189.0	189.3	189.2	189.8	190.1	190.5
Services less medical care services	185.4	193.1	191.4	191.6	192.3	193.6	194.2	194.7	194.6	194.4	194.8	195.0	195.7	196.5	197.0
Energy	124.6	128.7	128.6	132.9	140.6	140.3	131.3	128.6	132.6	121.2	114.8	110.0	110.5	109.8	114.7
All items less energy	175.1	179.8	178.8	179.2	179.2	179.5	179.8	180.1	180.7	181.3	181.8	181.5	181.6	182.5	182.9
All items less food and energy	177.1	181.7	180.9	181.3	181.2	181.4	181.7	181.9	182.6	183.2	183.8	183.5	183.6	184.4	184.9
Commodities less food and energy	145.4	146.1	146.8	147.3	146.4	145.6	145.4	144.6	146.0	146.3	146.9	145.6	144.4	144.8	145.0
Energy commodities	129.7	125.3	125.1	134.2	146.6	141.5	125.0	122.1	132.1	116.7	105.5	97.5	99.2	99.5	108.7
Services less energy	198.7	206.0	204.0	204.4	204.8	205.7	206.3	207.3	207.6	208.3	209.0	209.4	210.4	211.5	212.1

[1] Not seasonally adjusted.

[2] Indexes on a December 1997 = 100 base.

[3] Indexes on a December 1982 = 100 base.

[4] Indexes on a December 1988 = 100 base.

Dash indicates data not available.

NOTE: Index applied to a month as a whole, not to any specific date.

33. Consumer Price Index: U.S. city average and available local area data: all items

[1982–84 = 100, unless otherwise indicated]

Area	Pricing schedule[1]	All Urban Consumers							Urban Wage Earners				
		2001		2002				2001		2002			
		Nov.	Dec	Jan.	Feb.	Mar.	Apr.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
U.S. city average	M	177.4	176.7	177.1	177.8	178.8	178.8	178.8	172.9	173.2	173.7	174.7	174.7
Region and area size[2]													
Northeast urban	M	185.0	184.2	184.9	186.1	187.0	187.0	187.0	181.0	181.4	182.3	183.1	183.1
Size A—More than 1,500,000	M	186.1	185.4	186.2	187.8	188.6	183.6	168.6	181.1	181.6	182.8	183.6	183.6
Size B/C—50,000 to 1,500,000[3]	M	110.9	10.3	110.5	110.5	111.2	111.2	111.2	109.9	110.1	110.1	110.8	110.8
Midwest urban[4]	M	172.5	171.9	172.1	172.5	173.6	173.6	173.6	167.6	167.7	168.1	169.1	169.1
Size A—More than 1,500,000	M	174.2	173.8	174.1	174.7	176.0	176.0	176.0	168.7	168.8	169.4	170.6	170.6
Size B/C—50,000 to 1,500,000[3]	M	110.0	109.6	109.5	109.6	110.2	110.2	110.2	109.2	109.2	109.2	109.7	109.7
Size D—Nonmetropolitan (less than 50,000)	M	166.3	165.5	166.2	166.6	167.1	167.1	167.1	163.3	163.9	164.3	164.8	164.8
South urban	M	171.0	170.3	170.6	171.0	172.1	172.1	172.1	168.1	168.3	168.6	169.6	169.6
Size A—More than 1,500,000	M	172.2	171.7	171.7	172.4	173.3	173.3	173.3	169.0	169.0	169.5	170.5	170.5
Size B/C—50,000 to 1,500,000[3]	M	109.4	108.9	109.2	109.3	110.0	110.0	110.0	108.5	108.6	108.7	109.3	109.3
Size D—Nonmetropolitan (less than 50,000)	M	168.9	167.7	168.6	168.6	169.9	169.9	169.9	168.3	169.2	168.9	170.2	170.2
West urban	M	182.3	181.6	182.4	183.2	184.0	184.0	184.0	176.8	177.4	178.1	179.0	179.0
Size A—More than 1,500,000	M	112.0	111.6	111.9	185.4	186.2	186.2	186.2	176.9	177.7	178.6	179.5	179.5
Size B/C—50,000 to 1,500,000[3]	M	112.0	111.6	111.9	112.4	112.8	112.8	112.8	111.2	111.4	111.8	112.2	112.2
Size classes:													
A[5]	M	161.7	161.1	161.6	162.5	163.4	163.4	163.4	159.4	159.7	160.5	161.3	161.3
B/C[3]	M	110.2	109.7	109.9	110.1	110.7	110.7	110.7	109.3	109.9	109.5	110.1	110.1
D	M	170.8	169.8	170.5	170.7	171.5	171.5	171.5	168.5	169.7	169.3	170.2	170.2
Selected local areas[6]													
Chicago–Gary–Kenosha, IL–IN–WI	M	177.4	177.9	177.9	178.7	179.8	179.8	179.8	171.7	171.6	172.4	173.5	173.5
Los Angeles–Riverside–Orange County, CA	M	178.1	177.1	178.9	180.1	181.1	181.1	181.1	169.7	171.5	172.8	173.8	173.8
New York, NY–Northern NJ–Long Island, NY–NJ–CT–PA	M	187.8	187.3	188.5	189.9	191.1	191.1	191.1	182.8	183.5	184.7	185.6	185.6
Boston–Brockton–Nashua, MA–NH–ME–CT	1	192.7	–	192.9	–	194.7	194.7	194.7	–	191.8	–	193.2	193.2
Cleveland–Akron, OH	1	172.3	–	171.4	–	173.7	173.7	173.7	–	162.8	–	164.1	164.1
Dallas–Ft Worth, TX	1	171.5	–	170.6	–	172.1	172.1	172.1	–	170.0	–	171.4	171.4
Washington–Baltimore, DC–MD–VA–WV[7]	1	110.9	–	110.9	–	111.9	111.9	111.9	–	110.5	–	111.4	111.4
Atlanta, GA	2	–	174.8	–	176.1	–	–	–	172.0	–	173.2	–	–
Detroit–Ann Arbor–Flint, MI	2	–	173.5	–	176.2	–	–	–	167.9	–	170.5	–	–
Houston–Galveston–Brazoria, TX	2	–	157.1	–	156.6	–	–	–	155.2	–	154.3	–	–
Miami–Ft. Lauderdale, FL	2	–	173.1	–	175.0	–	–	–	170.5	–	172.3	–	–
Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD	2	–	179.9	–	182.0	–	–	–	179.2	–	181.4	–	–
San Francisco–Oakland–San Jose, CA	2	–	190.6	–	191.3	–	–	–	186.5	–	186.8	–	–
Seattle–Tacoma–Bremerton, WA	2	–	186.1		187.6	–	–	–	181.1	–	182.5	–	–

[1] Foods, fuels, and several other items priced every month in all areas; most other goods and services priced as indicated:

M—Every month.

1—January, March, May, July, September, and November.

2—February, April, June, August, October, and December.

[2] Regions defined as the four Census regions.

[3] Indexes on a December 1996 = 100 base.

[4] The "North Central" region has been renamed the "Midwest" region by the Census Bureau. It is composed of the same geographic entities.

[5] Indexes on a December 1986 = 100 base.

[6] In addition, the following metropolitan areas are published semiannually and appear in tables 34 and 39 of the January and July issues of the *CPI Detailed Report*: Anchorage, AK; Cincinnati–Hamilton, OH–KY–IN; Denver–Boulder–Greeley, CO; Honolulu, HI; MO–KS; Milwaukee–Racine, WI; Minneapolis–St. Paul, MN–WI; Pittsburgh, PA; Port-land–Salem, OR–WA; St Louis, MO–IL; San Diego, CA; Tampa–St. Petersburg–Clearwater, FL.

[7] Indexes on a November 1996 = 100 base.

Dash indicates data not available.

NOTE: Local area CPI indexes are byproducts of the national CPI program. Each local index has a smaller sample size and is, therefore, subject to substantially more sampling and other measurement error. As a result, local area indexes show greater volatility than the national index, although their long-term trends are similar. Therefore, the Bureau of Labor Statistics strongly urges users to consider adopting the national average CPI for use in their escalator clauses. Index applies to a month as a whole, not to any specific date.

34. Annual data: Consumer Price Index, U.S. city average, all items and major groups

[1982–84 = 100]

Series	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Consumer Price Index for All Urban Consumers:										
All items:										
Index	140.3	144.5	148.2	152.4	156.9	160.5	163.0	166.6	172.2	177.1
Percent change	3.0	3.0	2.6	2.8	3.0	2.3	1.6	2.2	3.4	2.8
Food and beverages:										
Index	138.7	141.6	144.9	148.9	153.7	157.7	161.1	164.6	168.4	173.6
Percent change	1.4	2.1	2.3	2.8	3.2	2.6	2.2	2.2	2.3	3.1
Housing:										
Index	137.5	141.2	144.8	148.5	152.8	156.8	160.4	163.9	169.6	176.4
Percent change	2.9	2.7	2.5	2.6	2.9	2.6	2.3	2.2	3.5	4.0
Apparel:										
Index	131.9	133.7	133.4	132.0	131.7	132.9	133.0	131.3	129.6	127.3
Percent change	2.5	1.4	–.2	–1.0	–.2	.9	.1	–1.3	–1.3	–1.8
Transportation:										
Index	126.5	130.4	134.3	139.1	143.0	144.3	141.6	144.4	153.3	154.3
Percent change	2.2	3.1	3.0	3.6	2.8	0.9	–1.9	2.0	6.2	0.7
Medical care:										
Index	190.1	201.4	211.0	220.5	228.2	234.6	242.1	250.6	260.8	272.8
Percent change	7.4	5.9	4.8	4.5	3.5	2.8	3.2	3.5	4.1	4.6
Other goods and services:										
Index	183.3	192.9	198.5	206.9	215.4	224.8	237.7	258.3	271.1	282.6
Percent change	6.8	5.2	2.9	4.2	4.1	4.4	5.7	8.7	5.0	4.2
Consumer Price Index for Urban Wage Earners and Clerical Workers:										
All items:										
Index	138.2	142.1	145.6	149.8	154.1	157.6	159.7	163.2	168.9	173.5
Percent change	2.9	2.8	2.5	2.9	2.9	2.3	1.3	2.2	3.5	2.7

35. Producer Price Indexes, by stage of processing

[1982 = 100]

Grouping	Annual average		2001										2002		
	2000	2001	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Finished goods	138.0	140.7	141.0	141.7	142.5	142.1	140.7	141.1	141.7	139.6	139.7	137.2	137.5	137.7	138.9
Finished consumer goods	138.2	141.5	141.9	142.7	143.8	143.3	141.5	142.0	142.9	139.9	138.4	136.8	137.3	137.6	139.2
Finished consumer foods	137.2	141.3	140.9	141.6	141.8	141.9	141.2	142.6	142.9	141.8	140.5	140.4	141.1	142.7	143.7
Finshed consumer goods excluding foods	138.4	141.4	142.1	142.9	144.5	143.7	141.4	141.6	142.7	139.0	137.3	135.1	135.5	135.4	137.2
Nondurable goods less food	138.7	142.8	143.8	144.9	147.3	146.5	143.1	143.5	145.1	139.2	136.8	134.0	134.5	134.5	137.0
Durable goods	133.9	133.9	134.1	134.2	133.8	133.2	133.2	133.0	133.2	134.4	134.5	133.9	134.0	133.6	133.7
Capital equipment	138.8	139.7	139.7	140.0	139.7	139.6	139.8	139.5	139.4	139.8	139.9	139.7	139.6	139.6	139.5
Intermediate materials, supplies, and components	129.2	128.7	130.8	130.6	131.2	131.4	130.3	129.8	130.1	127.6	126.7	125.4	125.6	125.5	126.5
Materials and components for manufacturing	128.1	127.4	128.9	128.7	128.6	128.3	127.5	126.9	126.6	125.9	125.2	124.7	124.6	124.8	125.3
Materials for food manufacturing	119.2	124.3	122.3	122.3	124.6	125.7	126.1	128.1	127.5	126.1	123.9	122.5	122.6	123.3	123.2
Materials for nondurable manufacturing	132.6	131.6	135.8	135.2	134.2	133.4	131.9	130.1	129.9	128.7	127.4	126.2	124.9	125.7	126.7
Materials for durable manufacturing	129.0	125.2	126.7	126.0	126.9	126.5	125.3	124.6	124.2	123.4	122.8	122.5	122.7	122.7	123.6
Components for manufacturing	126.2	126.3	126.4	126.6	126.4	126.4	126.2	126.2	125.9	125.9	125.9	126.0	126.5	126.4	126.5
Materials and components for construction	150.7	150.6	150.2	150.4	151.6	151.7	151.0	151.0	150.8	150.4	150.3	149.0	150.3	150.3	150.5
Processed fuels and lubricants	102.0	104.5	106.9	105.9	108.1	110.2	106.8	106.0	108.4	97.4	94.7	89.3	90.4	89.6	92.8
Containers	151.6	153.1	152.8	153.2	153.9	154.1	153.6	153.2	153.0	152.4	152.2	152.2	152.5	152.3	151.6
Supplies	136.9	138.6	138.7	139.0	139.0	138.8	138.8	138.7	138.6	138.3	138.3	138.1	138.3	138.1	138.3
Crude materials for further processing	120.6	121.3	131.5	132.9	130.9	122.8	116.1	113.4	108.0	97.7	104.8	94.8	98.1	97.6	102.3
Foodstuffs and feedstuffs	100.2	106.2	108.9	109.1	110.3	109.7	109.6	108.9	108.5	104.7	98.3	96.4	99.5	102.3	102.9
Crude nonfood materials	130.4	127.3	142.2	144.5	140.4	127.4	116.3	112.4	103.8	89.4	105.5	90.2	93.6	90.4	98.3
Special groupings:															
Finished goods, excluding foods	138.1	140.4	140.9	141.6	142.6	142.0	140.5	140.5	141.3	138.8	137.7	136.1	136.3	136.2	137.4
Finished energy goods	94.1	96.8	99.7	101.2	104.1	102.7	97.0	97.8	100.1	90.1	85.5	80.7	81.7	81.8	85.6
Finished goods less energy	144.9	147.5	147.1	147.5	147.7	147.6	147.5	147.7	147.9	147.9	147.7	147.6	147.6	147.9	148.3
Finished consumer goods less energy	147.4	150.8	150.2	150.6	151.6	150.9	150.7	151.1	151.4	151.3	151.0	150.9	151.0	151.5	152.0
Finished goods less food and energy	148.0	150.0	149.5	149.8	150.0	149.9	149.9	149.7	149.8	150.4	150.6	150.4	150.3	150.1	150.2
Finished consumer goods less food and energy	154.0	156.9	156.1	156.4	156.9	156.7	156.8	156.6	156.8	157.5	157.8	157.6	157.5	157.2	157.4
Consumer nondurable goods less food and energy	169.8	175.1	173.5	174.0	175.4	175.5	175.5	175.3	175.6	175.8	176.4	176.4	176.1	176.0	176.2
Intermediate materials less foods and feeds	130.1	130.5	131.7	131.6	132.1	132.3	131.0	130.4	130.7	128.2	127.3	126.0	126.3	126.2	127.1
Intermediate foods and feeds	111.7	115.9	114.1	114.0	114.9	116.3	117.1	119.4	118.7	117.3	115.5	114.3	113.9	114.0	114.4
Intermediate energy goods	101.7	104.1	106.4	105.5	107.6	109.7	106.3	105.6	107.9	97.1	94.3	89.0	90.0	89.2	92.4
Intermediate goods less energy	135.0	135.1	136.0	136.0	136.1	135.9	135.3	134.9	134.7	134.2	133.7	133.4	133.4	133.5	133.8
Intermediate materials less foods and energy	136.6	136.4	137.4	137.4	137.5	137.2	136.5	136.0	135.8	135.3	134.9	134.6	134.7	134.8	135.1
Crude energy materials	122.1	122.8	141.0	145.2	139.8	123.1	109.0	104.2	93.1	75.2	96.5	76.7	81.0	75.7	87.2
Crude materials less energy	111.7	112.2	115.2	114.3	115.3	114.8	114.3	113.6	113.3	109.8	104.8	103.4	105.9	108.6	108.8
Crude nonfood materials less energy	145.2	130.8	134.6	130.8	130.9	130.6	129.4	128.4	128.5	125.8	124.5	124.2	125.4	127.4	126.7

36. Producer Price Indexes for the net output of major industry groups

[December 1984 = 100, unless otherwise indicated]

SIC	Industry	Annual average		2001										2002		
		2000	2001	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
-	**Total mining industries**	113.5	114.9	130.7	132.2	127.5	115.5	103.4	100.4	92.6	78.8	93.2	76.0	81.6	77.9	86.0
10	Metal mining	73.8	70.6	73.1	70.0	71.4	71.0	70.4	69.6	70.6	70.4	68.1	67.8	69.7	73.8	71.8
12	Coal mining (12/85 = 100)	84.8	91.3	90.3	90.6	92.2	87.7	90.9	89.9	92.5	92.7	95.5	91.8	94.6	91.8	95.3
13	Oil and gas extraction (12/85 = 100)	126.8	128.4	149.3	151.5	144.9	129.6	112.9	109.4	98.3	79.7	98.8	79.1	84.0	78.0	90.2
14	Mining and quarrying of nonmetallic minerals, except fuels	137.0	141.0	140.8	140.8	140.7	141.8	141.6	141.2	141.4	141.9	141.8	141.4	142.3	143.0	143.1
-	**Total manufacturing industries**	133.5	134.5	134.6	135.4	136.3	136.0	134.6	134.8	135.6	133.6	132.8	131.4	131.7	132.0	132.9
20	Food and kindred products	128.5	132.8	131.7	132.5	133.2	133.8	133.9	134.7	134.7	133.9	132.4	131.8	131.5	132.2	132.3
21	Tobacco manufactures	345.8	386.1	372.3	372.1	391.2	391.7	391.1	391.0	391.1	391.1	398.3	398.3	391.7	391.8	392.1
22	Textile mill products	116.7	116.9	117.0	117.0	117.1	117.2	116.9	116.6	116.5	116.2	116.2	116.1	116.5	115.2	115.5
23	Apparel and other finished products made from fabrics and similar materials	125.7	125.8	125.7	125.9	125.8	125.7	125.9	126.1	125.9	125.9	125.9	125.4	125.3	125.3	125.5
24	Lumber and wood products, except furniture	158.1	156.1	154.5	154.7	160.5	161.3	158.2	157.5	156.9	154.3	153.8	153.3	154.3	154.9	156.9
25	Furniture and fixtures	143.3	145.1	144.8	144.7	144.9	145.2	145.3	145.2	145.3	145.8	145.8	145.5	145.6	145.8	145.9
26	Paper and allied products	145.8	146.2	147.0	147.0	146.9	146.8	146.4	145.4	145.5	145.1	144.4	144.7	144.2	143.4	142.8
27	Printing, publishing, and allied industries	182.9	188.6	187.6	188.4	188.8	188.4	188.6	188.9	188.6	189.2	189.6	189.5	192.0	192.3	192.3
28	Chemicals and allied products	156.7	158.4	161.9	161.4	160.4	160.0	158.8	156.3	156.4	156.0	155.4	154.0	153.6	154.5	154.8
29	Petroleum refining and related products	112.8	105.3	107.3	114.1	120.9	116.9	103.8	106.8	115.4	93.8	87.2	75.3	77.9	79.6	89.0
30	Rubber and miscellaneous plastics products	124.6	125.9	126.8	127.4	126.6	126.4	126.5	126.0	125.2	125.6	125.3	125.4	125.6	124.5	124.8
31	Leather and leather products	137.9	141.2	140.9	142.8	142.9	142.6	141.9	142.1	141.3	141.0	140.2	140.0	140.3	140.8	140.7
32	Stone, clay, glass, and concrete products	134.6	136.0	135.4	135.6	136.0	135.7	135.9	135.9	136.4	136.7	137.1	136.8	136.9	136.8	136.2
33	Primary metal industries	119.8	116.1	117.4	116.8	116.9	116.5	116.1	115.8	115.2	114.7	114.3	114.0	113.7	113.5	114.4
34	Fabricated metal products, except machinery and transportation equipment	130.3	131.0	130.8	131.2	131.1	131.1	131.1	131.1	131.1	131.0	131.0	131.1	131.1	131.3	131.4
35	Machinery, except electrical	117.5	117.9	117.8	118.0	118.0	118.1	118.1	118.0	117.8	117.7	117.8	117.8	117.8	117.4	117.7
36	Electrical and electronic machinery, equipment, and supplies	108.3	107.0	107.5	107.5	107.4	107.3	106.9	106.4	106.4	106.5	106.6	106.6	107.2	107.1	106.8
37	Transportation	136.8	137.8	137.9	136.1	137.4	137.1	137.3	137.2	137.2	136.5	136.5	137.9	137.7	137.8	137.9
38	Measuring and controlling instruments; photographic, medical, and optical goods; watches and clocks	126.2	127.2	126.9	126.9	127.3	127.4	127.2	127.4	127.5	127.1	127.6	127.8	128.2	128.4	128.4
39	Miscellaneous manufacturing industries industries (12/85 = 100)	130.9	132.3	132.3	132.2	132.5	132.5	132.7	132.3	132.6	132.6	132.1	132.3	132.5	132.9	132.9
	Service industries:															
42	Motor freight transportation and warehousing (06/93 = 100)	119.4	123.1	122.6	122.7	123.0	123.2	123.3	123.4	123.6	123.8	124.0	123.3	123.4	123.3	123.2
43	U.S. Postal Service (06/89 = 100)	135.2	143.4	141.3	141.3	141.3	141.3	145.4	145.4	145.4	145.4	145.4	145.4	145.4	145.4	145.4
44	Water transportation (12/92 = 100)	122.6	130.5	126.8	125.9	125.6	130.3	131.8	132.0	140.9	134.0	131.2	129.7	129.8	129.5	128.7
45	Transportation by air (12/92 = 100)	147.7	157.3	155.4	155.4	156.4	156.6	157.6	159.1	158.6	159.8	158.5	155.3	158.0	159.0	164.4
46	Pipelines, except natural gas (12/92 = 100)	102.3	110.2	108.9	108.9	109.0	109.0	110.9	111.2	111.3	111.5	111.3	111.3	111.2	111.3	111.3

37. Annual data: Producer Price Indexes, by stage of processing

[1982 = 100]

Index	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Finished goods										
Total	123.2	124.7	125.5	127.9	131.3	131.8	130.7	133.0	138.0	140.7
Foods	123.3	125.7	126.8	129.0	133.6	134.5	134.3	135.1	137.2	141.3
Energy	77.8	78.0	77.0	78.1	83.2	83.4	75.1	78.8	94.1	96.8
Other	134.2	135.8	137.1	140.0	142.0	142.4	143.7	146.1	148.0	150.0
Intermediate materials, supplies, and components										
Total	114.7	116.2	118.5	124.9	125.7	125.6	123.0	123.2	129.2	129.7
Foods	113.9	115.6	118.5	119.5	125.3	123.2	123.2	120.8	119.2	124.3
Energy	84.3	84.6	83.0	84.1	89.8	89.0	80.8	84.3	101.7	104.1
Other	122.0	123.8	127.1	135.2	134.0	134.2	133.5	133.1	136.6	136.4
Crude materials for further processing										
Total	100.4	102.4	101.8	102.7	113.8	111.1	96.8	98.2	120.6	121.3
Foods	105.1	108.4	106.5	105.8	121.5	112.2	103.9	98.7	100.2	106.2
Energy	78.8	76.7	72.1	69.4	85.0	87.3	68.6	78.5	122.1	122.8
Other	94.2	94.1	97.0	105.8	105.7	103.5	84.5	91.1	118.0	101.8

38. U.S. export price indexes by Standard International Trade Classification

[2000 = 100]

SITC Rev. 3	Industry	2001										2002		
		Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
0	**Food and live animals**	102.5	101.9	101.2	101.1	101.8	102.6	103.3	102.7	100.9	101.1	102.7	100.0	100.0
01	Meat and meat preparations	102.6	105.2	106.2	106.1	105.7	106.4	107.8	107.8	99.2	97.8	93.1	91.2	93.1
04	Cereals and cereal preparations	107.9	104.2	104.3	102.6	102.2	104.5	106.4	103.9	105.2	107.2	108.3	105.8	105.4
0	Vegetables, fruit, and nuts, prepared fresh or dry	97.9	99.8	97.4	98.6	101.7	102.4	100.8	102.1	99.7	100.5	110.5	102.5	102.1
2	**Crude materials, inedible, except fuels**	96.0	94.5	93.3	92.6	92.4	91.1	89.5	87.1	86.3	87.0	87.1	86.8	87.7
22	Oilseeds and oleaginous fruits	94.5	89.7	91.0	95.6	102.5	104.3	99.0	89.8	89.1	90.9	91.6	89.4	92.0
24	Cork and wood	96.1	94.1	93.1	92.8	93.4	92.9	90.2	89.7	88.7	87.9	88.1	87.6	87.2
25	Pulp and waste paper	90.1	88.2	82.3	80.6	78.2	76.6	77.3	77.7	77.4	77.2	75.8	73.4	73.7
26	Textile fibers and their waste	97.6	93.5	92.5	90.9	90.4	89.3	87.7	84.5	82.0	84.0	85.3	86.6	86.2
28	Metalliferous ores and metal scrap	92.0	92.6	91.6	91.0	87.8	86.2	85.1	82.7	81.4	81.3	84.9	87.0	87.3
3	**Mineral fuels, lubricants, and related products**	102.4	104.8	106.8	103.2	96.7	97.5	103.3	93.4	88.3	82.4	86.8	84.0	89.8
32	Coal, coke, and briquettes	99.3	106.4	106.6	106.9	106.8	107.9	108.8	108.9	108.9	108.8	109.5	109.7	110.8
33	Petroleum, petroleum products, and related materials	0.2	102.7	106.1	101.8	93.7	95.2	103.6	88.4	80.9	74.6	80.1	76.5	83.6
5	**Chemicals and related products, n.e.s.**	98.7	98.1	96.9	96.2	94.9	94.1	93.8	93.8	93.6	92.8	92.1	92.2	93.4
54	Medicinal and pharmaceutical products	99.2	99.6	99.5	99.5	100.2	100.8	101.1	100.9	100.9	100.9	101.1	100.8	101.1
55	Essential oils; polishing and cleaning preparations	100.2	99.8	99.7	99.7	99.1	99.0	99.1	99.0	98.9	98.8	97.1	96.8	97.6
57	Plastics in primary forms	97.8	96.1	94.9	93.9	91.2	90.0	88.6	89.2	88.5	86.5	85.4	85.7	87.9
58	Plastics in nonprimary forms	97.6	97.6	97.0	97.4	98.0	96.9	97.2	95.9	95.8	95.8	96.0	95.8	95.8
59	Chemical materials and products, n.e.s.	99.1	99.3	98.9	99.1	98.7	98.7	99.0	98.6	98.7	97.6	97.9	97.3	98.0
6	**Manufactured goods classified chiefly by materials**	100.2	99.9	99.7	99.5	99.1	98.4	98.2	97.3	96.6	96.7	97.3	97.4	96.9
62	Rubber manufactures, n.e.s.	100.4	99.7	99.8	99.8	100.5	101.0	101.0	100.6	100.5	100.9	100.4	100.5	100.9
64	Paper, paperboard, and articles of paper, pulp, and paperboard	98.4	98.1	98.0	97.4	95.1	95.1	95.6	95.1	95.2	95.2	95.3	94.8	93.0
66	Nonmetallic mineral manufactures, n.e.s.	99.8	100.3	100.4	100.8	100.8	101.0	101.1	101.1	101.4	101.7	101.7	101.5	102.5
68	Nonferrous metals	104.9	101.6	100.0	98.0	97.0	93.0	90.2	86.9	81.8	83.1	85.3	85.9	85.1
7	**Machinery and transport equipment**	100.6	100.5	100.4	100.3	100.2	100.0	100.0	99.7	99.7	99.6	99.3	99.3	99.5
71	Power generating machinery and equipment	102.0	102.3	102.3	102.3	102.4	102.8	103.0	103.1	104.1	104.0	104.6	104.7	104.9
72	Machinery specialized for particular industries	100.5	100.3	100.3	100.3	99.6	99.5	99.5	100.6	100.5	100.5	100.7	100.9	101.1
74	General industrial machines and parts, n.e.s., and machine parts	101.0	101.3	101.3	101.3	101.8	101.8	101.9	101.8	101.9	101.7	102.1	102.0	102.3
75	Computer equipment and office machines	97.8	97.7	96.9	95.9	95.6	94.8	94.8	94.6	94.2	92.9	92.5	92.9	93.0
76	Telecommunications and sound recording and reproducing apparatus and equipment	99.8	99.8	99.7	99.8	99.8	98.7	98.5	98.0	98.0	97.7	97.9	97.5	97.5
77	Electrical machinery and equipment	99.2	98.7	98.7	98.3	97.8	97.7	97.6	95.9	95.9	95.9	94.8	94.7	94.7
78	Road vehicles	100.2	100.2	100.2	100.2	100.3	100.2	100.2	100.3	100.2	100.3	100.1	100.2	100.3
87	**Professional, scientific, and controlling instruments and apparatus**	100.8	100.6	100.8	100.9	100.8	100.8	100.9	101.0	100.9	100.9	100.8	101.1	101.2

39. U.S. import price indexes by Standard International Trade Classification

[2000 = 100]

SITC Rev. 3	Industry	2001										2002		
		Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
0	**Food and live animals**	100.9	98.4	97.3	96.0	95.1	94.9	95.1	94.7	95.1	94.8	95.7	94.6	96.2
01	Meat and meat preparations	102.2	104.4	106.3	106.2	109.3	108.9	113.5	114.8	118.0	109.8	106.4	108.4	107.5
03	Fish and crustaceans, mollusks, and other aquatic invertebrates	93.0	91.2	90.7	90.0	87.0	86.8	86.3	84.6	82.8	82.9	82.3	82.0	80.4
05	Vegetables, fruit, and nuts, prepared fresh or dry	110.1	102.9	101.1	97.6	98.4	98.2	98.5	99.1	101.5	99.3	105.6	98.6	104.3
07	Coffee, tea, cocoa, spices, and manufactures thereof	88.7	89.6	87.4	85.8	81.2	78.8	80.1	77.3	77.2	78.5	77.5	78.8	83.3
1	**Beverages and tobacco**	100.4	100.6	102.0	101.7	101.7	102.1	102.0	102.7	102.6	103.0	102.8	102.8	102.9
11	Beverages	100.8	101.0	102.7	102.4	102.4	102.4	102.4	102.6	102.6	103.1	103.2	103.2	103.4
2	**Crude materials, inedible, except fuels**	94.5	95.0	98.1	102.8	96.4	95.8	96.6	94.5	91.3	89.9	90.0	92.7	95.7
24	Cork and wood	89.8	94.7	104.9	122.1	108.2	109.6	112.2	105.1	97.5	91.7	92.6	98.6	108.6
25	Pulp and waste paper	102.5	98.3	92.4	87.1	83.5	79.3	77.3	76.8	78.0	77.7	78.1	77.2	74.9
28	Metalliferous ores and metal scrap	96.6	96.5	95.5	93.9	94.4	93.1	92.8	91.6	89.8	91.2	91.4	92.7	93.6
29	Crude animal and vegetable materials, n.e.s.	92.0	86.5	94.9	92.9	80.8	81.0	83.8	93.4	93.1	96.0	92.2	91.7	91.2
3	**Mineral fuels, lubricants, and related products**	90.8	90.2	93.1	90.4	94.4	85.6	85.8	72.3	65.0	61.2	64.1	64.7	74.7
33	Petroleum, petroleum products, and related materials	86.5	85.8	90.0	89.3	84.4	86.1	86.8	73.0	63.0	59.8	62.8	64.9	75.4
34	Gas, natural and manufactured	119.1	119.0	113.7	97.4	82.8	80.9	77.8	65.7	75.9	68.7	70.8	58.3	65.0
5	**Chemicals and related products, n.e.s.**	102.4	102.2	101.6	100.5	99.3	98.4	98.3	98.8	97.8	97.5	97.6	96.8	96.2
52	Inorganic chemicals	107.2	104.0	101.2	100.1	99.4	98.0	98.1	99.4	98.9	97.6	97.0	97.1	97.8
53	Dying, tanning, and coloring materials	101.4	100.8	100.2	98.1	95.6	95.7	96.3	97.1	96.8	97.1	97.8	97.4	97.2
54	Medicinal and pharmaceutical products	97.5	96.9	96.7	96.7	99.0	97.3	97.0	97.5	97.3	97.0	97.0	96.4	96.0
55	Essential oils; polishing and cleaning preparations	99.7	99.0	98.7	98.4	98.1	98.1	99.7	99.8	99.7	100.1	100.1	99.9	99.9
57	Plastics in primary forms	101.1	101.1	101.1	102.1	102.1	100.5	99.7	99.8	99.8	99.8	98.5	97.0	91.5
58	Plastics in nonprimary forms	105.3	103.8	103.6	102.4	100.7	100.7	99.3	101.6	101.1	100.9	100.7	100.6	100.6
59	Chemical materials and products, n.e.s.	101.4	100.9	100.1	99.9	99.1	99.0	99.0	99.2	98.6	97.8	96.1	95.1	93.6
6	**Manufactured goods classified chiefly by materials**	100.0	99.1	98.2	98.0	96.8	95.0	94.8	93.8	92.4	92.0	92.4	92.2	92.3
62	Rubber manufactures, n.e.s.	99.7	99.4	99.4	99.0	98.8	98.7	98.7	98.5	97.8	97.9	97.4	97.6	97.5
64	Paper, paperboard, and articles of paper, pulp, and paperboard	103.6	104.7	103.7	102.7	101.7	99.9	99.3	98.6	97.6	96.1	95.0	93.7	93.5
66	Nonmetallic mineral manufactures, n.e.s.	99.9	99.6	99.7	99.4	99.3	99.1	99.3	97.5	97.2	97.5	97.2	97.1	97.0
68	Nonferrous metals	104.6	99.6	96.1	95.3	91.0	83.4	82.2	78.7	73.7	73.8	76.4	77.2	76.9
69	Manufactures of metals, n.e.s.	99.3	100.1	100.0	100.1	99.3	99.3	99.3	99.7	99.5	99.0	99.0	98.4	98.5
7	**Machinery and transport equipment**	99.2	98.7	98.5	98.5	98.2	98.1	98.0	98.0	97.9	97.7	97.5	97.3	97.1
72	Machinery specialized for particular industries	99.7	99.5	99.2	99.1	98.5	98.6	99.1	99.2	99.0	98.7	98.5	98.5	98.6
74	General industrial machines and parts, n.e.s., and machine parts	99.3	98.8	98.3	98.2	98.0	97.8	98.0	98.7	98.1	97.8	98.0	97.1	97.5
75	Computer equipment and office machines	95.7	94.1	93.9	93.6	92.1	91.7	90.0	89.1	89.0	88.8	88.6	88.3	88.0
76	Telecommunications and sound recording and reproducing apparatus and equipment	98.1	97.3	97.1	97.2	97.3	97.1	96.8	96.5	96.4	96.3	95.5	94.8	94.8
77	Electrical machinery and equipment	99.9	99.3	99.2	98.8	98.9	98.7	98.6	98.7	98.6	97.0	97.5	97.7	96.8
78	Road vehicles	100.1	99.9	99.7	99.8	99.7	88.7	100.0	100.3	100.2	100.3	100.2	100.2	100.1
85	Footwear	100.8	100.4	100.2	100.1	100.1	100.5	100.4	99.9	99.9	100.3	99.3	99.5	99.5
88	Photographic apparatus, equipment, and supplies, and optical goods, n.e.s.	99.7	98.9	98.8	98.5	97.9	97.9	98.2	98.6	98.5	98.4	97.7	97.3	97.3

40. U.S. export price indexes by end-use category

[2000 = 100]

Category	2001										2002		
	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
ALL COMMODITIES	100.0	99.9	99.6	99.4	99.0	98.8	99.0	98.3	97.8	97.6	97.5	97.3	97.6
Foods, feeds, and beverages	101.0	100.2	99.8	100.4	101.7	102.6	102.6	101.2	99.7	100.6	102.0	98.9	99.5
Agricultural foods, feeds, and beverages	101.2	100.6	100.6	101.2	102.4	104.0	103.6	102.2	100.7	101.6	102.6	99.4	99.8
Nonagricultural (fish, beverages) food products	99.4	97.0	92.7	92.6	94.8	90.2	92.9	91.9	90.9	90.4	96.3	94.6	96.5
Industrial supplies and materials	98.9	98.7	98.0	97.2	95.5	94.8	95.2	93.6	92.3	91.4	91.5	91.4	91.9
Agricultural industrial supplies and materials	101.7	101.7	102.1	99.3	98.5	97.2	96.8	93.8	92.1	93.3	92.2	92.8	93.8
Fuels and lubricants	100.3	103.9	106.0	102.8	96.9	97.6	103.2	93.6	88.5	83.5	85.0	83.2	85.6
Nonagricultural supplies and materials, excluding fuel and building materials	98.5	97.8	96.5	96.1	94.9	94.0	93.8	93.4	92.8	92.3	92.2	92.3	92.7
Selected building materials	97.5	96.8	96.3	97.0	97.0	96.8	95.5	95.1	94.4	94.1	94.4	94.4	94.3
Capital goods	100.6	100.5	100.4	100.3	100.2	100.0	100.0	99.7	99.7	99.4	99.1	99.2	99.4
Electric and electrical generating equipment	100.9	101.3	101.7	101.7	101.8	101.5	101.6	101.6	101.6	101.5	102.0	102.1	102.1
Nonelectrical machinery	99.7	99.5	99.4	99.1	98.9	98.6	98.6	98.2	98.1	97.7	97.2	97.3	97.5
Automotive vehicles, parts, and engines	100.3	100.5	100.5	100.4	100.5	100.5	100.4	100.5	100.4	100.5	100.8	100.8	100.9
Consumer goods, excluding automotive	99.6	99.5	99.4	99.4	99.5	99.5	99.7	99.7	99.8	99.9	99.5	99.2	99.1
Nondurables, manufactured	99.0	98.9	98.9	99.0	98.9	98.9	99.1	99.0	99.1	99.1	98.2	98.2	98.2
Durables, manufactured	100.2	100.1	99.9	100.0	100.2	100.2	100.4	100.6	100.5	100.5	100.6	99.9	99.6
Agricultural commodities	101.3	100.8	100.8	100.9	101.8	102.8	102.5	100.7	99.2	100.2	100.8	98.3	98.8
Nonagricultural commodities	99.9	99.8	99.5	99.3	98.8	98.5	98.6	98.1	97.7	97.3	97.2	97.2	97.5

41. U.S. import price indexes by end-use category

[2000 = 100]

Category	2001										2002		
	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
ALL COMMODITIES	98.3	97.8	98.0	97.6	96.1	96.0	95.9	93.7	92.3	91.4	91.8	91.7	92.7
Foods, feeds, and beverages	98.9	97.0	96.6	95.4	94.4	94.5	95.0	94.5	95.2	94.6	96.0	93.8	94.9
Agricultural foods, feeds, and beverages	101.0	98.9	98.4	97.0	96.7	96.9	97.8	97.8	99.5	98.3	100.2	97.2	99.4
Nonagricultural (fish, beverages) food products	94.5	3.1	92.9	92.2	89.7	89.5	89.2	87.8	86.4	86.8	87.0	86.8	85.5
Industrial supplies and materials	96.0	95.4	96.5	95.5	91.4	91.0	91.0	84.3	79.9	77.6	79.2	79.5	84.2
Fuels and lubricants	91.1	90.4	93.4	90.9	84.8	86.0	86.1	72.9	65.7	61.6	64.7	65.3	74.9
Petroleum and petroleum products	87.2	86.2	90.3	89.4	84.6	86.1	86.7	73.4	63.6	58.9	63.2	65.1	75.2
Paper and paper base stocks	104.4	104.6	102.2	100.0	98.0	95.1	93.9	93.1	92.3	90.7	90.0	88.8	88.0
Materials associated with nondurable supplies and materials	102.8	102.2	101.4	100.3	98.6	98.0	97.9	98.0	96.7	96.2	96.4	96.1	95.7
Selected building materials	91.9	93.9	100.1	111.1	103.0	102.9	103.7	99.9	96.1	92.9	93.1	96.0	100.9
Unfinished metals associated with durable goods	99.5	96.9	94.2	93.6	91.4	87.4	87.1	85.1	82.1	82.1	83.2	83.8	83.8
Nonmetals associated with durable goods	101.6	101.2	100.9	100.6	100.1	100.2	100.4	99.9	98.9	99.0	98.5	97.4	97.2
Capital goods	98.7	98.0	97.8	97.7	97.3	97.1	96.8	96.7	96.5	96.2	96.0	95.6	95.2
Electric and electrical generating equipment	102.1	101.6	101.8	101.8	101.6	101.3	101.4	101.4	101.2	100.6	100.0	99.5	95.4
Nonelectrical machinery	98.0	97.1	96.9	96.7	96.2	96.0	95.6	95.4	95.3	94.9	94.7	94.4	94.4
Automotive vehicles, parts, and engines	100.1	100.0	99.8	99.8	99.7	99.6	99.9	100.1	100.0	100.1	99.9	100.1	99.9
Consumer goods, excluding automotive	99.8	99.5	99.5	99.3	99.2	99.2	99.1	98.9	98.8	98.7	98.7	98.5	98.2
Nondurables, manufactured	100.2	100.1	100.0	99.8	100.0	100.0	99.6	99.6	99.6	99.7	99.8	99.7	99.2
Durables, manufactured	99.4	99.1	99.0	98.9	98.6	98.6	98.7	98.4	98.3	98.0	97.8	97.4	97.3
Nonmanufactured consumer goods	99.3	98.2	99.6	99.2	97.6	97.4	97.9	95.8	95.7	96.4	95.8	95.7	95.9

42. U.S. international price indexes for selected categories of services

[2000 = 100]

Category	2000				2001				2002
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.
Air freight (inbound)	100.7	100.1	100.2	99.0	97.9	95.1	94.9	95.2	93.8
Air freight (outbound)	99.2	100.3	100.2	100.2	100.1	98.0	97.6	97.9	95.3
Air passenger fares (U.S. carriers)	95.8	101.2	103.1	99.9	101.9	106.4	107.6	103.5	103.3
Air passenger fares (foreign carriers)	97.1	102.1	103.2	97.6	100.7	103.8	110.2	100.8	99.4
Ocean liner freight (inbound)	96.6	101.3	101.1	101.0	102.8	100.8	98.1	93.6	91.7

43. Indexes of productivity, hourly compensation, and unit costs, quarterly data seasonally adjusted

[1992 = 100]

Item	1999				2000				2001				2002
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I
Business													
Output per hour of all persons	112.7	112.4	113.3	115.3	115.3	117.5	117.8	118.7	118.6	119.3	119.5	121.1	123.6
Compensation per hour	123.1	124.4	126.1	127.3	129.3	132.1	134.3	137.4	139.1	140.9	142.1	142.9	143.8
Real compensation per hour	106.6	106.9	107.5	107.7	108.4	110.0	110.8	112.5	112.8	113.4	114.1	114.9	115.6
Unit labor costs	109.2	110.7	111.3	110.4	112.2	113.5	114.0	115.8	117.3	118.1	118.9	119.1	116.4
Unit nonlabor payments	114.5	112.6	112.3	114.8	114.2	115.1	113.8	112.0	111.7	111.5	111.7	112.0	114.8
Implicit price deflator	111.2	111.4	111.7	112.0	112.9	113.5	113.9	114.4	115.2	115.7	116.2	115.8	115.8
Nonfarm business													
Output per hour of all persons	112.2	111.8	112.7	113.8	113.8	116.7	117.2	117.8	117.8	118.4	118.7	120.2	115.8
Compensation per hour	122.2	123.5	125.1	126.6	128.7	131.2	133.6	136.5	138.1	139.7	141.0	141.8	122.8
Real compensation per hour	105.8	106.1	106.8	107.1	107.9	109.2	110.2	111.8	112.0	112.4	113.2	114.0	142.7
Unit labor costs	109.0	110.4	111.1	110.2	112.1	112.5	114.0	115.8	117.2	118.0	118.7	117.9	114.7
Unit nonlabor payments	116.0	114.2	114.0	116.5	115.9	116.7	115.3	113.4	113.1	112.9	112.9	113.9	116.2
Implicit price deflator	111.5	111.8	112.1	112.5	113.5	114.0	114.5	114.9	115.7	116.1	116.1	116.4	116.4
Nonfinancial corporations													
Output per hour of all employees	114.5	114.7	115.4	116.4	117.2	118.8	119.6	119.8	119.9	120.9	121.2	124.4	-
Compensation per hour	119.1	120.4	121.9	123.2	125.0	127.6	129.7	132.7	134.5	136.5	138.1	139.4	-
Real compensation per hour	103.1	103.5	104.0	104.2	104.8	106.1	107.0	108.7	109.1	109.9	110.9	112.5	-
Total unit costs	103.7	104.5	105.4	105.6	106.5	107.1	108.1	110.0	111.4	112.5	114.0	111.9	-
Unit labor costs	104.1	104.9	105.6	105.8	106.6	107.4	108.5	110.8	112.2	112.9	114.0	112.0	-
Unit nonlabor costs	102.8	103.4	105.0	105.1	106.2	106.5	107.1	107.8	109.3	111.2	114.2	111.6	-
Unit profits	141.6	135.4	128.0	131.3	135.1	139.3	135.8	120.5	111.1	107.4	99.6	111.6	-
Unit nonlabor payments	112.7	111.6	110.8	111.8	113.6	114.8	114.4	111.0	109.8	110.2	110.4	111.6	-
Implicit price deflator	106.9	107.1	107.4	107.8	108.9	109.8	110.5	110.9	111.4	112.0	112.8	111.9	-
Manufacturing													
Output per hour of all persons	127.6	128.3	129.6	132.7	135.2	137.2	138.3	2'138.3	138.3	138.1	139.0	140.4	143.9
Compensation per hour	119.8	121.2	123.0	124.5	126.3	128.6	131.9	135.9	137.9	140.0	141.2	142.0	142.9
Real compensation per hour	103.7	104.2	104.9	105.4	105.9	107.0	108.8	111.3	111.8	112.6	113.4	114.2	114.9
Unit labor costs	93.9	94.4	94.9	93.8	93.4	93.8	95.4	97.6	99.7	101.3	101.5	101.2	99.3

44. Annual indexes of multifactor productivity and related measures, selected years

[1996 = 100, unless otherwise indicated]

Item	1960	1970	1980	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Private business													
Productivity:													
Output per hour of all persons	45.6	63.0	75.8	90.2	91.3	94.8	95.4	96.6	97.3	100.0	102.0	104.8	104.8
Output per unit of capital services	110.4	111.1	101.5	99.3	96.1	97.7	98.5	100.3	99.7	100.0	100.5	100.1	100.1
Multifactor productivity	65.2	80.0	88.3	95.3	94.4	96.6	97.1	98.1	98.4	100.0	101.1	102.6	102.6
Output	27.5	42.0	59.4	83.6	82.6	85.7	88.5	92.8	95.8	100.0	105.2	110.6	110.6
Inputs:													
Labor input	54.0	61.0	71.9	89.4	88.3	89.3	91.8	95.6	98.0	100.0	103.7	106.4	106.4
Capital services	24.9	37.8	58.6	84.2	86.0	87.7	89.8	92.6	96.0	100.0	104.7	110.4	110.4
Combined units of labor and capital input	42.3	52.4	67.3	87.7	87.5	88.8	91.1	94.6	97.3	100.0	104.0	107.7	107.7
Capital per hour of all persons	41.3	56.7	74.7	90.8	95.0	97.0	96.8	96.3	97.6	100.0	101.5	104.7	104.7
Private nonfarm business													
Productivity:													
Output per hour of all persons	48.7	64.9	77.3	90.3	91.4	94.8	95.3	96.5	97.5	100.0	101.7	104.5	104.5
Output per unit of capital services	120.1	118.3	105.7	100.0	96.6	97.9	98.8	100.3	99.9	100.0	100.2	99.8	99.8
Multifactor productivity	69.1	82.6	90.5	95.6	94.7	96.6	97.1	98.1	98.6	100.0	100.9	102.4	102.4
Output	27.2	41.9	59.6	83.5	82.5	85.5	88.4	92.6	95.8	100.0	105.1	110.6	110.6
Inputs:													
Labor input	50.1	59.3	70.7	89.2	88.0	89.0	91.8	95.4	97.8	100.0	103.8	106.6	106.6
Capital services	22.6	35.5	56.4	83.5	85.4	87.3	89.5	92.3	95.9	100.0	104.9	110.8	110.8
Combined units of labor and capital input	39.3	50.7	65.9	87.3	87.1	88.4	91.0	94.4	97.2	100.0	104.2	108.0	108.0
Capital per hour of all persons	40.5	54.8	73.1	90.3	94.7	96.8	96.5	96.3	97.6	100.0	101.5	104.7	104.7
Manufacturing (1992 = 100)													
Productivity:													
Output per hour of all persons	41.8	54.2	70.1	92.8	95.0	100.0	101.9	105.0	109.0	112.8	117.1	124.3	124.3
Output per unit of capital services	124.3	116.5	100.9	101.6	97.5	100.0	101.1	104.0	105.0	104.5	105.6	106.5	106.5
Multifactor productivity	72.7	84.4	86.6	99.3	98.3	100.0	100.4	102.6	105.0	106.1	109.8	113.2	113.2
Output	38.5	56.5	75.3	97.3	95.4	100.0	103.3	108.7	113.4	116.9	123.5	130.7	130.7
Inputs:													
Hours of all persons	92.0	104.2	107.5	104.8	100.4	100.0	101.4	103.6	104.0	103.7	105.5	105.2	105.2
Capital services	30.9	48.5	74.7	95.8	97.9	100.0	102.2	104.5	108.0	111.9	116.9	122.8	122.8
Energy	51.3	85.4	92.5	99.9	100.1	100.0	103.7	107.3	109.5	107.0	103.9	109.2	109.2
Nonenergy materials	38.2	44.8	75.0	92.5	93.6	100.0	105.7	111.3	112.8	120.4	120.4	127.2	127.2
Purchased business services	28.2	48.8	73.7	92.5	92.1	100.0	103.0	105.1	110.0	108.9	114.2	116.8	116.8
Combined units of all factor inputs	52.9	67.0	87.0	98.0	97.0	100.0	102.9	106.0	107.9	110.2	112.5	115.5	115.5

45. Annual indexes of productivity, hourly compensation, unit costs, and prices, selected years

[1992 = 100]

Item	1960	1970	1980	1990	1993	1994	1995	1996	1997	1998	1999	2000	2001
Business													
Output per hour of all persons	48.8	67.0	80.4	95.2	100.5	101.9	102.6	105.4	107.8	110.8	113.8	116.9	119.6
Compensation per hour	13.7	23.5	54.2	90.7	102.5	104.5	106.7	110.1	113.5	119.6	125.1	132.8	141.2
Real compensation per hour	60.0	78.9	89.4	96.5	99.9	99.7	99.3	99.7	100.6	104.6	107.1	110.1	114.2
Unit labor costs	28.0	35.1	67.4	95.3	101.9	102.6	104.1	104.5	105.3	108.0	109.9	113.6	118.1
Unit nonlabor payments	25.2	31.6	61.5	93.9	102.5	106.4	109.4	113.3	117.1	115.1	115.1	113.9	111.8
Implicit price deflator	27.0	33.9	65.2	94.8	102.2	104.0	106.0	107.7	109.7	110.6	111.8	113.7	115.8
Nonfarm business													
Output per hour of all persons	51.9	68.9	82.0	95.3	100.5	101.8	102.8	105.4	107.5	110.4	113.2	116.2	118.8
Compensation per hour	14.3	23.7	54.6	90.5	102.2	104.3	106.6	109.8	113.1	119.0	124.2	132.0	140.1
Real compensation per hour	62.8	79.5	90.0	96.3	99.6	99.5	99.2	99.4	100.2	104.0	106.4	109.4	113.3
Unit labor costs	27.5	34.4	66.5	95.0	101.7	102.5	103.7	104.2	105.2	107.7	109.7	113.6	117.9
Unit nonlabor payments	24.6	31.3	60.5	93.6	103.0	106.9	110.4	113.5	118.0	116.3	116.8	115.4	113.3
Implicit price deflator	26.5	33.3	64.3	94.5	102.2	104.1	106.1	107.6	109.8	110.8	112.3	114.2	116.2
Nonfinancial corporations													
Output per hour of all employees	55.4	70.4	81.1	95.4	100.7	103.1	104.2	107.5	108.4	112.3	116.2	119.9	121.6
Compensation per hour	15.6	25.3	56.4	90.8	102.0	104.2	106.2	109.0	110.3	115.9	121.1	128.3	137.1
Real compensation per hour	68.3	84.7	93.1	96.7	99.5	99.4	98.8	98.7	97.8	101.3	103.7	106.4	110.9
Total unit costs	26.8	34.8	68.4	95.9	101.0	101.1	102.0	101.2	101.5	102.6	103.7	106.7	112.4
Unit labor costs	28.1	35.9	69.6	95.2	101.3	101.0	101.9	101.4	101.8	103.2	104.2	107.0	112.8
Unit nonlabor costs	23.3	31.9	65.1	98.0	100.2	101.3	102.2	100.6	100.9	101.2	102.5	105.6	111.6
Unit profits	50.2	44.4	68.8	94.3	113.2	131.7	139.0	152.2	156.9	148.9	147.6	131.0	107.4
Unit nonlabor payments	30.2	35.1	66.0	97.1	103.5	109.0	111.6	113.8	115.2	113.4	114.0	112.1	110.5
Implicit price deflator	28.8	35.6	68.4	95.8	102.1	103.7	105.1	105.5	106.2	106.6	107.4	108.7	112.0
Manufacturing													
Output per hour of all persons	41.8	54.2	70.1	92.8	101.9	105.0	109.0	112.8	117.1	124.3	129.6	137.5	139.0
Compensation per hour	14.9	23.7	55.6	90.8	102.7	105.6	107.9	109.3	111.4	117.3	122.0	130.7	140.2
Real compensation per hour	65.2	79.5	91.7	96.6	100.2	100.8	100.4	99.0	98.8	102.6	104.5	108.8	113.4
Unit labor costs	35.6	43.8	79.3	97.8	100.8	100.7	99.0	96.9	95.1	94.4	94.1	95.1	100.9
Unit nonlabor payments	26.8	29.3	80.2	99.7	100.9	102.8	106.9	109.9	109.6	104.4	105.5	–	–
Implicit price deflator	30.2	34.9	79.8	99.0	100.9	102.0	103.9	104.9	104.0	100.5	101.1	–	–

Dash indicates data not available.

46. Annual indexes of output per hour for selected 3-digit SIC industries

[1987=100]

Industry	SIC	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Mining												
Copper ores	102	102.7	100.5	115.2	118.1	126.0	117.2	116.5	118.9	118.3	110.0	122.6
Gold and silver ores	104	122.3	127.4	141.6	159.8	160.8	144.2	138.3	158.5	187.6	197.5	239.9
Bituminous coal and lignite mining	122	118.7	122.4	133.0	141.2	148.1	155.9	168.0	176.6	188.0	194.9	207.0
Crude petroleum and natural gas	131	97.0	97.9	102.1	105.9	112.4	119.4	123.9	125.2	127.5	134.5	142.5
Crushed and broken stone	142	102.2	99.8	105.0	103.6	108.7	105.4	107.2	112.6	110.2	105.0	101.9
Manufacturing												
Meat products	201	97.1	99.6	104.6	104.3	101.2	102.3	97.4	102.5	102.3	101.8	102.9
Dairy products	202	107.3	108.3	111.4	109.6	111.8	116.4	116.0	119.3	119.3	112.7	113.5
Preserved fruits and vegetables	203	95.6	99.2	100.5	106.8	107.6	109.1	109.2	110.7	117.8	120.4	123.5
Grain mill products	204	105.4	104.9	107.8	109.2	108.4	115.4	108.0	118.2	126.2	129.3	127.5
Bakery products	205	92.7	90.6	93.8	94.4	96.4	97.3	95.6	99.1	100.9	106.4	107.6
Sugar and confectionery products	206	103.2	102.0	99.8	104.5	106.2	108.3	113.7	116.7	123.0	127.0	130.5
Fats and oils	207	118.1	120.1	114.1	112.6	111.8	120.3	110.1	120.2	137.3	154.4	151.4
Beverages	208	117.0	120.0	127.1	126.4	130.1	133.5	135.0	135.5	136.4	129.7	128.6
Miscellaneous food and kindred products	209	99.2	101.7	101.5	105.2	100.9	102.9	109.1	104.0	112.4	113.9	116.3
Cigarettes	211	113.2	107.6	111.6	106.5	126.6	142.9	147.2	147.2	152.2	137.7	139.1
Broadwoven fabric mills, cotton	221	103.1	111.2	110.3	117.8	122.1	134.0	137.3	131.2	136.2	139.3	140.2
Broadwoven fabric mills, manmade	222	111.3	116.2	126.2	131.7	142.5	145.3	147.6	162.2	168.6	175.3	167.4
Narrow fabric mills	224	96.5	99.6	112.9	111.4	120.1	118.9	126.3	110.8	117.7	124.9	117.1
Knitting mills	225	107.5	114.0	119.3	127.9	134.1	138.3	150.3	138.0	135.9	146.6	155.6
Textile finishing, except wool	226	83.4	79.9	78.6	79.3	81.2	78.5	79.2	94.3	93.7	94.4	97.2
Carpets and rugs	227	93.2	89.2	96.1	97.1	93.3	95.8	100.2	100.3	102.3	96.0	103.0
Yarn and thread mills	228	110.2	111.4	119.6	126.6	130.7	137.4	147.4	150.4	153.0	157.6	155.4
Miscellaneous textile goods	229	109.2	104.6	106.5	110.4	118.5	123.7	123.1	118.7	120.1	128.0	134.4
Men's and boys' furnishings	232	102.1	108.4	109.1	108.4	111.7	123.4	134.7	162.1	174.8	190.9	200.3
Women's and misses' outerwear	233	104.1	104.3	109.4	121.8	127.4	135.5	141.6	149.9	151.9	173.9	189.9
Women's and children's undergarments	234	102.1	113.7	117.4	124.5	138.0	161.3	174.5	208.9	216.4	294.7	352.3
Hats, caps, and millinery	235	89.2	91.1	93.6	87.2	77.7	84.3	82.2	87.1	98.7	99.3	106.1
Miscellaneous apparel and accessories	238	90.6	91.8	91.3	94.0	105.5	116.8	120.1	101.5	108.0	105.8	111.3
Miscellaneous fabricated textile products	239	99.9	100.7	107.5	108.5	107.8	109.2	105.6	119.2	117.3	128.8	132.5
Sawmills and planing mills	242	99.8	102.6	108.1	101.9	103.3	110.2	115.6	116.9	118.7	125.4	124.4
Millwork, plywood, and structural members	243	98.0	98.0	99.9	97.0	94.5	92.7	92.4	89.1	91.3	89.2	91.4
Wood containers	244	111.2	113.1	109.4	100.1	100.9	106.1	106.7	106.2	106.5	103.9	104.6
Wood buildings and mobile homes	245	103.1	103.0	103.1	103.8	98.3	97.0	96.7	100.3	99.2	100.3	94.6
Miscellaneous wood products	249	107.7	110.5	114.2	115.3	111.8	115.4	114.4	123.4	131.2	140.7	146.5
Household furniture	251	104.5	107.1	110.5	110.6	112.5	116.9	121.6	121.3	125.7	128.9	128.4
Office furniture	252	95.0	94.1	102.5	103.2	100.5	101.1	106.4	118.3	113.1	108.9	111.2
Public building and related furniture	253	119.8	120.2	140.6	161.0	157.4	173.3	181.5	214.9	207.6	222.4	202.0
Partitions and fixtures	254	95.6	93.0	102.7	107.4	98.9	101.2	97.5	121.1	125.6	125.9	131.9
Miscellaneous furniture and fixtures	259	103.5	102.1	99.5	103.6	104.7	110.0	113.2	110.7	121.9	119.1	110.5
Pulp mills	261	116.7	128.3	137.3	122.5	128.9	131.9	132.6	82.3	86.6	84.8	78.8
Paper mills	262	102.3	99.2	103.3	102.4	110.2	118.6	111.6	112.0	114.8	126.2	133.5
Paperboard mills	263	100.6	101.4	104.4	108.4	114.9	119.5	118.0	126.7	127.8	134.9	135.3
Paperboard containers and boxes	265	101.3	103.4	105.2	107.9	108.4	105.1	106.3	109.7	113.5	111.9	112.9
Miscellaneous converted paper products	267	101.4	105.3	105.5	107.9	110.6	113.3	113.6	119.5	123.0	126.0	128.3
Newspapers	271	90.6	85.8	81.5	79.4	79.9	79.0	77.4	79.0	83.6	86.0	88.3
Periodicals	272	93.9	89.5	92.9	89.5	81.9	87.8	89.1	100.1	112.2	111.2	109.9
Books	273	96.6	100.8	97.7	103.5	103.0	101.6	99.3	102.6	100.9	106.1	106.1
Miscellaneous publishing	274	92.2	95.9	105.8	104.5	97.5	94.8	93.6	114.5	119.4	127.2	127.8
Commercial printing	275	102.5	102.0	108.0	106.9	106.5	107.2	108.3	108.8	109.9	115.0	118.7
Manifold business forms	276	93.0	89.1	94.5	91.1	82.0	76.9	75.2	77.9	76.7	70.6	69.4
Greeting cards	277	100.6	92.7	96.7	91.4	89.0	92.5	90.8	92.2	104.1	109.3	105.1
Blankbooks and bookbinding	278	99.4	96.1	103.6	98.7	105.4	108.7	114.5	114.2	116.5	123.8	126.2
Printing trade services	279	99.3	100.6	112.0	115.3	111.0	116.7	126.2	123.3	126.7	121.5	119.6
Industrial inorganic chemicals	281	106.8	109.7	109.7	105.6	102.3	109.3	110.1	116.8	145.8	148.5	141.3
Plastics materials and synthetics	282	100.9	100.0	107.5	112.0	125.3	128.3	125.3	135.4	142.2	148.6	151.0
Drugs	283	103.8	104.5	99.5	99.7	104.6	108.7	112.5	112.4	104.3	105.6	106.2
Soaps, cleaners, and toilet goods	284	103.8	105.3	104.4	108.7	111.2	118.6	120.9	126.4	122.7	114.8	124.8
Paints and allied products	285	106.3	104.3	102.9	108.8	116.7	118.0	125.6	126.4	126.8	122.7	124.6
Industrial organic chemicals	286	101.4	95.8	94.6	92.2	99.9	98.6	99.0	111.3	105.7	120.6	127.8
Agricultural chemicals	287	104.7	99.5	99.5	103.8	105.0	108.5	110.0	119.8	118.0	104.6	112.0

See footnotes at end of table.

46. Continued - Annual indexes of output per hour for selected 3-digit SIC industries

[1987=100]

Industry	SIC	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Miscellaneous chemical products	289	97.3	96.1	101.8	107.1	105.7	107.8	110.1	120.3	120.8	123.3	125.6
Petroleum refining	291	109.2	106.6	111.3	120.1	123.8	132.3	142.0	149.2	155.8	170.2	180.2
Asphalt paving and roofing materials	295	98.0	94.1	100.4	108.0	104.9	111.2	113.1	123.1	124.7	123.4	126.1
Miscellaneous petroleum and coal products	299	94.8	90.6	101.5	104.2	96.3	87.4	87.1	96.5	98.5	86.5	82.9
Tires and inner tubes	301	103.0	102.4	107.8	116.5	124.1	131.1	138.8	149.1	144.1	142.1	145.9
Hose and belting and gaskets and packing	305	96.1	92.4	97.8	99.7	102.7	104.6	107.4	113.5	112.7	110.6	115.4
Fabricated rubber products, n.e.c.	306	109.0	109.9	115.2	123.1	119.1	121.5	121.0	125.3	132.3	136.9	144.7
Miscellaneous plastics products, n.e.c.	308	105.7	108.3	114.4	116.7	120.8	121.0	124.7	129.9	133.8	140.9	145.4
Footwear, except rubber	314	101.1	94.4	104.2	105.2	113.0	117.1	126.1	121.4	110.9	132.6	146.2
Flat glass	321	84.5	83.6	92.7	97.7	97.6	99.6	101.5	107.6	114.0	129.4	140.[illegible]
Glass and glassware, pressed or blown	322	104.8	102.3	108.9	108.7	112.9	115.7	121.4	128.3	135.2	139.3	1[illegible]6.8
Products of purchased glass	323	92.6	97.7	101.5	106.2	105.9	106.1	122.0	125.1	122.0	130.2	137.2
Cement, hydraulic	324	112.4	108.3	115.1	119.9	125.6	124.3	128.7	133.1	134.1	138.6	136.9
Structural clay products	325	109.6	109.8	111.4	106.8	114.0	112.6	119.6	111.9	114.8	123.5	124.8
Pottery and related products	326	98.7	95.9	99.5	100.3	108.5	109.4	119.4	124.2	127.4	122.0	121.2
Concrete, gypsum, and plaster products	327	102.3	101.2	102.5	104.6	101.5	104.5	107.3	107.6	112.8	111.1	105.1
Miscellaneous nonmetallic mineral products	329	95.4	94.0	104.3	104.5	106.3	107.8	110.4	114.7	114.9	113.3	116.1
Blast furnace and basic steel products	331	109.7	107.8	117.0	133.6	142.4	142.6	147.5	155.0	151.0	155.6	160.1
Iron and steel foundries	332	106.1	104.5	107.2	112.1	113.0	112.7	116.2	120.8	121.1	128.9	132.1
Primary nonferrous metals	333	102.3	110.7	101.9	107.9	105.3	111.0	110.8	112.0	118.9	117.7	111.9
Nonferrous rolling and drawing	335	92.7	91.0	96.0	98.3	101.2	99.2	104.0	111.3	115.7	121.4	118.0
Nonferrous foundries (castings)	336	104.0	103.6	103.6	108.5	112.1	117.8	122.3	127.0	131.5	129.8	129.7
Miscellaneous primary metal products	339	113.7	109.1	114.5	111.3	134.5	152.2	149.6	136.2	140.0	149.0	154.3
Metal cans and shipping containers	341	117.6	122.9	127.8	132.3	140.9	144.2	155.2	160.3	163.8	157.9	159.5
Cutlery, handtools, and hardware	342	97.3	96.8	100.1	104.0	109.2	111.3	118.2	114.6	115.7	121.9	125.4
Plumbing and heating, except electric	343	102.6	102.0	98.4	102.0	109.1	109.2	118.6	127.3	130.5	125.7	132.2
Fabricated structural metal products	344	98.8	100.0	103.9	104.8	107.7	105.8	106.5	111.9	112.7	112.8	112.8
Metal forgings and stampings	346	95.6	92.9	103.7	108.7	108.5	109.3	113.6	120.2	125.9	128.3	129.8
Metal services, n.e.c.	347	104.7	99.4	111.6	120.6	123.0	127.7	128.4	124.4	127.3	126.1	135.7
Ordnance and accessories, n.e.c.	348	82.1	81.5	88.6	84.6	83.6	87.6	87.5	93.7	96.6	91.0	92.8
Miscellaneous fabricated metal products	349	97.5	97.4	101.1	102.0	103.2	106.6	108.3	107.7	111.6	109.3	109.2
Engines and turbines	351	106.5	105.8	103.3	109.2	122.3	122.7	136.6	136.9	146.1	151.5	164.5
Farm and garden machinery	352	116.5	112.9	113.9	118.6	125.0	134.7	137.2	141.2	148.5	128.6	139.6
Construction and related machinery	353	107.0	99.1	102.0	108.2	117.7	122.1	123.3	132.5	137.6	133.6	139.8
Metalworking machinery	354	101.1	96.4	104.3	107.4	109.9	114.8	114.9	119.2	119.8	123.0	129.8
Special industry machinery	355	107.5	108.3	106.0	113.6	121.2	132.3	134.0	131.7	124.5	138.6	172.2
General industrial machinery	356	101.5	101.6	101.6	104.8	106.7	109.0	109.4	110.0	111.2	113.1	118.7
Computer and office equipment	357	138.1	149.6	195.7	258.6	328.6	469.4	681.3	960.2	1356.6	1862.5	2172.0
Refrigeration and service machinery	358	103.6	100.7	104.9	108.6	110.7	112.7	114.7	115.0	121.4	124.0	122.3
Industrial machinery, n.e.c.	359	107.3	109.0	117.0	118.5	127.4	138.8	141.4	129.3	127.5	135.8	141.8
Electric distribution equipment	361	106.3	106.5	119.6	122.2	131.8	143.0	143.9	142.8	147.5	148.9	155.4
Electrical industrial apparatus	362	107.7	107.1	117.1	132.9	134.9	150.8	154.3	164.2	162.3	158.3	157.0
Household appliances	363	105.8	106.5	115.0	123.4	131.4	127.3	127.4	142.9	150.2	149.5	162.4
Electric lighting and wiring equipment	364	99.9	97.5	105.7	107.8	113.4	113.7	116.9	121.8	129.2	132.4	134.8
Communications equipment	366	123.8	129.1	154.9	163.1	186.4	200.7	229.5	275.4	284.5	371.9	448.8
Electronic components and accessories	367	133.4	154.7	189.3	217.9	274.0	401.5	515.0	613.4	768.6	1062.6	1440.1
Miscellaneous electrical equipment & supplies	369	90.6	98.6	101.3	108.2	110.5	114.1	123.1	128.3	135.3	147.2	156.0
Motor vehicles and equipment	371	102.4	96.6	104.2	106.2	108.8	106.7	107.2	116.3	125.2	136.7	127.1
Aircraft and parts	372	98.9	108.2	112.3	115.2	109.5	107.8	113.1	114.7	140.1	138.1	132.2
Ship and boat building and repairing	373	103.7	96.3	102.7	105.9	103.8	98.1	99.3	105.5	102.5	113.1	121.6
Railroad equipment	374	141.1	146.9	147.9	151.0	152.5	150.0	148.3	184.2	189.1	212.8	218.4
Motorcycles, bicycles, and parts	375	93.8	99.8	108.4	130.9	125.1	120.3	125.5	120.4	127.7	122.4	119.4
Guided missiles, space vehicles, parts	376	116.5	110.5	110.5	119.4	114.9	116.9	125.1	133.6	138.9	156.1	113.3
Search and navigation equipment	381	112.7	118.9	122.1	129.1	132.1	149.5	142.2	149.5	149.1	149.6	163.7
Measuring and controlling devices	382	106.4	113.1	119.9	124.0	133.8	146.4	150.5	142.4	143.5	152.4	158.5
Medical instruments and supplies	384	116.9	118.7	123.5	127.3	126.7	131.5	139.8	147.4	158.6	160.4	167.0
Ophthalmic goods	385	121.2	125.1	144.5	157.8	160.6	167.2	188.2	196.3	199.0	235.2	250.2
Photographic equipment & supplies	386	107.8	110.2	116.4	126.9	132.7	129.5	128.7	121.5	128.0	160.6	169.4
Jewelry, silverware, and plated ware	391	99.3	95.8	96.7	96.7	99.5	100.2	102.6	114.2	113.1	134.3	144.9
Musical instruments	393	97.1	96.9	96.0	95.6	88.7	86.9	78.8	82.9	81.4	97.1	105.3

See footnotes at end of table.

46. Continued - Annual indexes of output per hour for selected 3-digit SIC industries

[1987=100]

Industry	SIC	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Toys and sporting goods	394	108.1	109.7	104.9	114.2	109.7	113.6	119.9	125.7	131.6	126.6	140.4
Pens, pencils, office, and art supplies	395	118.2	116.8	111.3	111.6	129.9	135.2	144.1	127.5	132.5	123.4	124.9
Costume jewelry and notions	396	105.3	106.7	110.8	115.8	129.0	143.7	142.2	118.0	131.2	130.8	145.3
Miscellaneous manufactures	399	106.5	109.2	109.5	107.7	106.1	108.1	112.8	109.4	108.5	114.9	115.9
Transportation												
Railroad transportation	4011	118.5	127.8	139.6	145.4	150.3	156.2	167.0	169.8	173.3	182.5	195.8
Trucking, except local [1]	4213	111.1	116.9	123.4	126.6	129.5	125.4	130.9	132.4	129.9	131.6	131.2
United States postal service [2]	431	104.0	103.7	104.5	107.1	106.6	106.5	104.7	108.3	109.8	110.9	113.6
Air transportation	4512,13,22(pts.)	92.9	92.5	96.9	100.2	105.7	108.6	111.1	111.6	108.4	109.1	110.7
Utilities												
Telephone communications	481	113.3	119.8	127.7	135.5	142.2	148.1	159.5	160.9	170.1	186.3	201.3
Radio and television broadcasting	483	104.9	106.1	108.3	106.7	110.1	109.6	105.8	101.7	104.5	108.4	109.9
Cable and other pay TV services	484	92.6	87.6	88.5	85.3	83.4	84.5	81.9	84.7	86.1	85.0	87.6
Electric utilities	491,3(pts.)	110.1	113.4	115.2	24.1	50.5	80.8	116.8	150.0	159.6	162.0	169.6
Gas utilities	492,3(pts.)	105.8	109.6	111.1	121.8	125.6	137.1	145.9	158.6	144.4	147.2	160.6
Trade												
Lumber and other building materials dealers	521	104.3	102.3	106.4	111.4	118.9	117.8	121.6	121.8	134.2	143.0	144.2
Paint, glass, and wallpaper stores	523	106.8	100.4	107.6	114.2	127.8	130.9	133.5	134.8	163.5	165.1	170.1
Hardware stores	525	115.3	108.7	115.2	113.9	121.2	115.6	119.5	119.0	137.9	147.6	145.7
Retail nurseries, lawn and garden supply stores	526	84.7	89.3	101.2	107.1	117.0	117.4	136.4	127.5	133.7	150.4	154.5
Department stores	531	96.8	102.0	105.4	110.4	113.5	116.1	123.8	129.1	135.8	146.0	160.4
Variety stores	533	154.6	159.0	173.9	191.9	197.9	212.4	240.4	260.1	271.2	315.0	330.9
Miscellaneous general merchandise stores	539	118.6	124.8	140.4	164.3	164.8	167.4	167.7	170.4	185.9	199.6	224.3
Grocery stores	541	96.6	96.3	96.5	96.0	95.4	93.9	92.1	91.7	92.2	95.3	98.1
Meat and fish (seafood) markets	542	98.9	90.8	99.2	97.7	95.7	94.4	86.4	90.8	95.7	97.4	110.0
Retail bakeries	546	91.2	96.7	96.5	86.5	85.3	83.0	75.9	67.6	68.1	83.1	88.4
New and used car dealers	551	106.7	104.9	107.4	108.6	109.7	108.1	109.1	108.8	108.7	111.6	112.5
Auto and home supply stores	553	103.7	100.2	101.6	100.8	105.3	109.1	108.2	108.1	113.1	115.5	119.3
Gasoline service stations	554	103.0	104.8	110.2	115.9	121.1	127.2	126.1	126.1	133.9	141.7	139.0
Men's and boy's wear stores	561	115.6	121.9	122.3	119.5	121.7	121.4	129.8	136.3	145.2	154.5	165.0
Women's clothing stores	562	106.6	111.2	123.6	130.0	130.4	139.9	154.2	157.3	176.0	190.2	205.7
Family clothing stores	565	107.8	111.5	118.6	121.5	127.7	141.8	146.9	150.2	153.1	155.9	160.4
Shoe stores	566	107.9	107.8	115.5	117.3	130.7	139.2	151.9	148.4	145.0	152.9	160.2
Furniture and homefurnishings stores	571	104.6	105.4	113.9	113.3	114.7	117.4	123.6	124.2	127.3	134.5	141.1
Household appliance stores	572	104.6	107.2	116.1	118.7	122.4	139.6	142.2	155.2	184.2	186.4	209.3
Radio, television, computer, and music stores	573	120.8	129.3	139.3	153.8	178.2	198.1	206.6	216.8	258.3	309.1	359.4
Eating and drinking places	581	104.5	103.8	103.4	103.8	102.1	102.0	100.6	101.6	102.0	104.0	107.3
Drug and proprietary stores	591	106.3	108.0	107.6	109.6	109.9	111.1	113.9	119.8	125.7	129.8	136.9
Liquor stores	592	105.9	106.9	109.6	101.8	100.1	104.7	112.8	109.9	116.5	114.5	127.7
Used merchandise stores	593	103.0	102.3	115.7	116.7	119.5	120.6	132.6	140.3	163.6	183.2	216.7
Miscellaneous shopping goods stores	594	107.4	109.3	107.9	111.7	117.3	123.2	125.3	129.4	138.7	143.7	150.6
Nonstore retailers	596	111.1	112.5	126.5	132.2	149.0	152.5	173.5	186.8	208.3	220.6	263.2
Fuel dealers	598	84.6	85.3	84.3	91.9	99.0	111.4	112.5	109.1	105.8	115.2	117.3
Retail stores, n.e.c.	599	114.5	104.0	112.5	118.1	125.8	127.0	140.2	147.8	157.4	162.5	168.1
Finance and services												
Commercial banks	602	107.7	110.1	111.0	118.5	121.7	126.4	129.7	133.0	132.6	135.9	143.2
Hotels and motels	701	96.2	99.3	108.0	106.5	109.9	110.5	110.0	108.2	108.2	110.6	114.1
Laundry, cleaning, and garment services	721	102.3	99.9	99.3	99.9	105.0	106.6	109.8	109.0	116.0	120.8	123.6
Photographic studios, portrait	722	98.2	92.1	95.8	101.8	108.3	116.2	110.7	114.1	121.6	107.7	112.0
Beauty shops	723	97.5	95.8	100.9	97.0	101.1	104.8	107.6	108.5	110.5	113.4	114.5
Barber shops	724	100.7	94.9	113.2	121.9	118.8	115.7	128.8	150.4	157.4	132.8	129.9
Funeral services and crematories	726	91.2	89.9	103.8	98.7	104.3	100.2	97.6	101.9	104.2	100.2	93.9
Automotive repair shops	753	107.9	100.1	105.1	105.7	114.3	121.6	116.1	117.2	124.9	126.4	128.5
Motion picture theaters	783	118.1	118.2	114.8	113.8	110.4	105.0	104.1	103.4	106.1	108.7	112.3

[1] Refers to output per employee.

[2] Refers to output per full-time equivalent employee year on fiscal basis.

n.e.c. = not elsewhere classified

47. Unemployment rates, approximating U.S. concepts, in nine countries, quarterly data seasonally adjusted

Country	Annual average		2000				2001			
	2000	2001	I	II	III	IV	I	II	III	IV
United States	4.0	4.8	4.0	4.0	4.1	4.0	4.2	4.5	4.8	5.6
Canada	6.1	6.4	6.1	6.1	6.1	6.1	6.2	6.3	6.4	6.8
Australia	6.3	6.7	6.5	6.4	6.1	6.2	6.5	6.9	6.8	6.8
Japan[1]	4.8	5.1	4.8	4.7	4.7	4.8	4.8	4.9	5.2	5.5
France[1]	9.4	8.7	9.9	9.5	9.5	9.0	8.6	8.5	8.7	8.9
Germany[1]	8.3	–	8.4	8.3	8.2	8.1	–	–	–	–
Italy[1,2]	10.7	9.6	11.2	10.9	10.5	10.1	10.0	9.7	9.5	9.3
Sweden[1]	5.8	5.0	6.6	6.0	5.6	5.2	5.1	5.0	5.0	5.1
United Kingdom[1]	5.5	–	5.8	5.5	5.4	5.3	5.1	5.0	5.1	–

[1] Preliminary for 2000 for Japan, France, Germany (unified), Italy, and Sweden and for 1999 onward for the United Kingdom.

[2] Quarterly rates are for the first month of the quarter.

NOTE: Quarterly figures for France and Germany are calculated by applying annual adjustment factors to current published data, and therefore should be viewed as less precise indicators of unemployment under U.S. concepts than the annual figures. See "Notes on the data" for information on breaks in series. For further qualifications and historical data, see *Comparative Civilian Labor Force Statistics, Ten Countries,1959–2000* (Bureau of Labor Statistics, Mar. 16, 2001).

Dash indicates data not available.

48. Annual data: Employment status of the working-age population, approximating U.S. concepts, 10 countries

[Numbers in thousands]

Employment status and country	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Civilian labor force										
United States[1]	128,105	129,200	131,056	132,304	133,943	136,297	137,673	139,368	140,863	141,815
Canada	144,177	14,308	14,400	14,517	14,669	14,958	15,237	15,536	15,789	16,027
Australia	8,557	8,613	8,771	8,995	9,115	9,204	9,339	9,466	9,667	9,817
Japan	65,040	65,470	65,780	65,990	66,450	67,200	67,240	67,090	66,990	66,870
France	24,570	24,640	24,780	24,830	25,090	25,210	25,520	25,830	25,980	–
Germany[2]	39,040	39,140	39,210	39,100	39,180	39,480	39,520	39,630	–	–
Italy	22,910	22,570	22,450	22,460	22,570	22,680	22,960	23,130	23,340	23,540
Netherlands	6,950	7,100	7,190	7,290	7,370	7,530	7,690	7,900	8,050	–
Sweden	4,520	4,443	4,418	4,460	4,459	4,418	4,402	4,430	4,489	4,537
United Kingdom	28,410	28,440	28,440	28,560	28,720	28,910	29,040	29,300	29,450	–
Participation rate[3]										
United States1	66.4	66.3	66.6	66.6	66.8	67.1	67.1	67.1	67.2	66.9
Canada	65.9	65.5	65.2	64.9	64.7	65.0	65.4	65.8	65.9	66.0
Australia	63.9	63.5	63.9	64.6	64.6	64.3	64.3	64.2	64.7	64.7
Japan	63.4	63.3	63.1	62.9	63.0	63.2	62.8	62.4	62.0	61.6
France	55.9	55.8	55.8	55.6	55.8	55.7	56.1	56.4	56.4	–
Germany[2]	58.3	58.0	57.6	57.3	57.4	57.7	57.7	57.9	–	–
Italy	47.5	47.9	47.3	47.1	47.1	47.2	47.6	47.8	48.1	–
Netherlands	57.8	58.6	59	59.2	59.8	60.8	61.7	62.8	63.5	–
Sweden	65.7	64.5	63.7	64.1	64	63.3	62.8	62.8	63.8	64.2
United Kingdom	63.1	62.8	62.7	62.7	62.8	62.9	62.9	63.2	63.3	–
Employed										
United States[1]	118,492	120,259	123,060	124,900	126,708	129,558	131,463	133,488	135,208	135,073
Canada	12,672	12,770	13,027	13,271	13,380	13,705	14,068	14,456	14,827	14,997
Australia	7,660	7,699	7,942	8,256	8,364	8,444	8,618	8,808	9,068	9,157
Japan	63,620	63,810	63,860	63,890	64,200	64,900	64,450	63,920	63,790	63,470
France	22,020	21,740	21,720	21,910	21,960	22,090	22,510	22,940	23,530	–
Germany[2]	36,420	36,030	35,890	35,900	35,680	35,570	35,830	36,170	–	–
Italy	21,230	20,270	19,940	19,820	19,920	19,990	20,210	20,460	20,840	21,280
Netherlands	6,560	6,630	6,670	6,790	6,900	7,130	7,380	7,640	7,810	–
Sweden	4,265	4,028	3,992	4,056	4,019	3,973	4,034	4,117	4,229	4,309
United Kingdom	25,530	25,450	25,720	26,070	26,380	26,880	27,210	27,530	27,830	–
Employment-population ratio[4]										
United States[1]	61.5	61.7	62.5	62.9	63.2	63.8	64.1	64.3	64.5	63.8
Canada	58.9	58.5	59.0	59.4	59.1	59.7	60.4	61.3	62.1	61.9
Australia	57.2	56.8	57.8	59.2	59.3	59.0	59.3	59.8	60.6	60.3
Japan	62.0	61.7	61.3	60.9	60.9	61.0	60.2	59.4	59.0	58.4
France	50.1	49.2	48.9	49.0	48.8	48.8	49.5	50.1	51.1	–
Germany[2]	54.4	53.4	52.8	52.6	52.2	52.0	52.3	52.8	–	–
Italy	44.0	43.0	42.0	41.5	41.6	41.6	41.9	42.3	42.9	–
Netherlands	54.4	54.7	54.7	55.1	56.0	57.5	59.2	60.8	61.6	–
Sweden	62.0	58.5	57.6	58.3	57.7	56.9	57.6	58.4	60.1	61.0
United Kingdom	56.7	56.2	56.7	57.2	57.6	58.5	58.9	59.8	59.8	–
Unemployed										
United States[1]	9,613	8,940	7,996	7,404	7,236	6,739	6,210	5,880	5,655	6,742
Canada	1,505	1,539	1,373	1,246	1,289	1,252	1,169	1,080	962	1,031
Australia	897	314	829	739	739	751	760	658	611	661
Japan	1,420	1,660	1,920	2,100	2,250	2,300	2,790	3,170	3,200	3,400
France	2,550	2,900	3,060	2,920	3,130	3,120	3,020	2,890	2,450	–
Germany[2]	2,620	3,110	3,320	3,200	3,500	3,910	3,690	3,460	–	–
Italy	1,680	2,300	2,510	2,640	2,650	2,690	2,750	2,670	2,500	2,270
Netherlands	390	470	520	500	470	400	310	270	240	–
Sweden	255	415	426	404	440	445	368	313	260	228
United Kingdom	2,880	2,960	2,720	2,490	2,340	2,030	1,830	1,770	1,620	–
Unemployment rate										
United States[1]	7.5	6.9	6.1	5.6	5.4	4.9	4.5	4.2	4.0	4.8
Canada	10.6	10.8	9.5	8.6	8.8	8.4	7.7	7.0	6.1	6.4
Australia	10.5	10.6	9.4	8.2	8.2	8.3	7.7	7.0	6.3	6.7
Japan	2.2	2.5	2.9	3.2	3.4	3.4	4.1	4.7	4.8	5.1
France	10.4	11.8	12.3	11.8	12.5	12.4	11.8	11.2	9.4	8.7
Germany[2]	6.7	7.9	8.5	8.2	8.9	9.9	9.3	8.7	–	–
Italy	7.3	10.2	11.2	11.8	11.7	11.9	12.0	11.5	10.7	9.6
Netherlands	5.6	6.6	7.2	6.2	6.4	5.3	4.0	3.4	3.0	–
Sweden	5.6	9.3	9.6	9.1	9.9	10.1	8.4	7.1	5.8	5.0
United Kingdom	10.1	10.5	9.6	8.7	8.1	7.0	6.3	6.0	5.5	–

[1] Data for 1994 are not directly comparable with data for 1993 and earlier years. For additional information, see the box note under "Employment and Unemployment Data" in the notes to this section.

[2] Data from 1991 onward refer to unified Germany. See Comparative Civilian Labor Force Statistics, Ten Countries, 1959–2000, Mar. 16, 2001, on the Internet at http://stats.bls.gov/flsdata.htm.

[3] Labor force as a percent of the working-age population.

[4] Employment as a percent of the working-age population.

NOTE: See Notes on the data for information on breaks in series for the United States, France, Germany, Italy, the Netherlands, and Sweden.

Dash indicates data are not available.

p = preliminary.

49. Annual indexes of manufacturing productivity and related measures, 12 countries

[1992 = 100]

Item and country	1960	1970	1980	1989	1990	1991	1993	1994	1995	1996	1997	1998	1999	2000
Output per hour														
United States	–	–	70.5	95.7	96.9	97.8	102.1	107.3	113.8	117.0	121.2	126.5	135.3	142.8
Canada	32.5	56.0	74.4	93.2	94.7	95.5	104.0	109.7	111.3	110.1	113.2	113.1	114.9	116.3
Japan	13.8	37.5	63.2	88.5	94.4	99.0	101.7	103.3	111.0	116.1	121.0	121.2	126.9	134.1
Belgium	18.0	37.9	65.4	95.9	96.8	99.1	102.5	108.4	113.2	117.0	127.0	129.2	129.5	133.4
Denmark	79.9	52.7	90.3	99.6	96.1	99.6	104.5	–	–	–	–	–	–	–
France	21.9	43.0	66.6	91.9	93.6	96.9	100.6	108.6	114.7	115.3	123.8	129.5	132.9	141.1
Germany	29.2	52.0	77.2	94.6	99.0	99.0	101.6	110.1	113.2	118.8	122.4	126.7	129.5	–
Italy	22.5	42.2	70.6	91.3	93.9	95.9	101.8	106.1	111.2	110.8	113.7	113.1	113.5	117.8
Netherlands	18.5	37.9	68.6	96.9	98.5	99.6	101.6	113.2	118.2	120.2	122.3	122.0	128.5	133.8
Norway	37.0	58.3	76.7	94.6	96.6	97.5	100.6	101.4	102.0	102.0	103.0	103.6	103.1	104.2
Sweden	27.3	52.2	73.1	93.2	94.6	95.5	107.3	119.4	121.9	124.5	132.3	139.5	143.5	150.4
United Kingdom	30.0	43.2	54.3	86.2	89.1	93.8	103.9	107.1	104.9	103.8	105.2	106.9	111.6	117.6
Output														
United States	–	–	75.8	102.4	101.8	98.3	103.5	111.1	118.4	121.3	127.9	133.1	141.2	147.0
Canada	34.0	60.0	85.2	112.1	107.5	99.2	105.0	113.0	118.5	120.0	127.3	132.5	140.8	148.8
Japan	10.7	39.2	60.4	90.9	97.1	102.0	98.3	94.9	98.9	100.0	106.5	100.2	101.9	107.8
Belgium	30.7	57.8	78.2	99.1	101.0	100.7	97.0	101.4	104.2	106.8	113.8	116.4	118.0	122.2
Denmark	40.8	68.0	91.3	104.3	102.7	101.7	99.0	109.3	114.7	109.7	116.5	120.8	119.8	125.8
France	31.0	64.1	88.7	97.2	99.1	99.8	95.7	100.3	104.9	104.8	109.7	115.0	117.3	121.2
Germany	41.5	70.9	85.3	94.0	99.1	102.3	92.5	95.2	95.3	93.5	96.3	100.9	102.2	–
Italy	23.0	48.1	84.4	98.3	99.4	99.3	96.5	102.4	107.2	105.4	108.8	110.5	110.2	113.9
Netherlands	31.5	59.1	76.8	98.6	99.9	100.4	98.4	104.6	108.1	108.7	111.5	114.8	118.1	123.7
Norway	57.0	89.9	103.6	101.3	100.2	98.3	102.7	106.7	109.0	110.1	115.7	117.7	114.0	110.9
Sweden	45.9	80.7	90.7	110.9	110.1	104.1	101.9	117.1	128.4	131.1	138.0	147.8	153.8	163.4
United Kingdom	67.3	90.2	87.2	105.5	105.3	100.0	101.4	106.1	107.8	108.5	109.9	110.8	111.1	113.3
Total hours														
United States	92.1	104.4	107.5	107.1	104.8	100.4	101.4	103.6	104.0	103.6	105.5	105.2	104.3	102.9
Canada	88.3	107.1	114.6	120.2	113.5	103.9	100.1	103.0	106.4	109.0	112.4	117.1	122.6	128.0
Japan	77.8	104.4	95.6	102.7	102.9	103.1	94.7	91.9	89.1	88.7	88.0	82.7	80.3	80.2
Belgium	170.7	174.7	119.7	102.3	104.3	101.5	94.7	93.6	92.0	91.1	89.6	90.1	91.1	91.7
Denmark	136.5	129.0	101.1	104.7	103.7	102.1	94.8	–	–	–	–	–	–	–
France	141.2	148.9	133.2	105.8	105.9	103.1	95.1	92.4	91.5	90.7	88.6	88.8	88.3	85.9
Germany	142.3	136.3	110.5	99.3	100.1	103.3	91.0	86.5	84.2	80.1	78.7	79.6	79.5	–
Italy	102.3	113.8	119.3	107.6	105.9	103.6	94.9	96.5	98.4	95.1	95.7	97.7	97.1	96.7
Netherlands	170.5	156.1	111.7	99.7	101.4	100.9	96.8	92.4	91.5	90.4	91.1	91.8	92.0	92.5
Norway	154.1	154.3	135.0	107.1	103.7	100.8	102.1	105.2	106.8	107.9	112.3	113.6	110.6	106.4
Sweden	168.3	154.7	124.0	119.0	118.4	109.0	94.9	98.1	105.3	105.3	104.3	105.8	107.1	108.6
United Kingdom	224.6	208.8	160.5	122.4	118.1	106.6	97.6	99.1	102.7	104.5	104.5	103.6	99.5	96.3
Compensation per hour														
United States	14.9	23.7	55.6	86.6	90.8	95.6	102.7	105.6	107.9	109.4	111.4	117.4	122.1	130.7
Canada	10.0	17.1	47.6	82.6	88.3	95.0	102.0	103.7	106.0	107.0	109.3	111.6	113.1	117.0
Japan	4.3	16.4	58.5	84.0	90.5	98.4	102.8	104.9	108.3	109.2	112.9	115.8	115.2	114.5
Belgium	5.4	13.7	52.5	85.9	90.1	97.3	104.8	106.1	109.2	110.9	114.9	116.6	118.3	121.1
Denmark	4.6	13.3	49.6	87.7	92.7	95.9	104.6	–	–	–	–	–	–	–
France	4.3	10.3	40.8	86.0	90.6	96.2	103.1	105.6	108.5	110.3	113.1	115.7	118.7	125.7
Germany	6.1	20.7	53.6	83.2	89.4	92.1	106.1	112.3	118.5	125.2	128.0	128.9	130.8	–
Italy	1.7	5.0	29.0	77.4	85.8	94.2	106.1	178.1	114.6	122.0	127.2	125.6	129.4	133.6
Netherlands	6.4	20.2	64.4	86.6	90.9	95.3	103.8	108.2	110.7	113.0	115.8	120.6	124.0	131.0
Norway	4.7	11.8	39.0	87.2	92.3	97.5	101.5	104.4	109.2	113.6	118.7	126.1	133.4	140.1
Sweden	4.1	10.7	37.3	79.4	87.8	95.5	97.4	100.0	108.5	114.4	119.4	124.4	127.5	130.7
United Kingdom	3.0	6.1	32.1	73.8	82.9	93.8	104.7	106.8	107.9	109.5	113.8	120.5	129.8	134.7
Unit labor costs: National currency basis														
United States	–	–	78.8	90.5	93.7	97.8	100.6	98.5	94.8	93.5	91.9	92.8	90.2	91.5
Canada	25.9	30.5	63.9	88.6	93.3	99.5	97.2	94.5	95.2	97.2	96.5	98.6	98.4	100.6
Japan	31.3	43.8	92.5	94.9	95.9	97.4	101.1	101.5	97.6	94.0	93.3	95.5	90.8	85.4
Belgium	30.1	41.7	80.3	88.7	93.0	98.1	102.3	97.9	96.4	94.7	90.5	90.2	91.4	90.8
Denmark	15.4	75.2	55.0	88.1	93.6	98.3	100.1	93.0	93.8	100.9	96.9	98.7	101.9	100.2
France	19.4	24.0	61.3	93.5	98.8	99.3	102.4	97.3	94.6	95.7	91.4	89.4	89.3	89.1
Germany	27.8	39.8	69.4	87.9	90.3	93.1	104.5	102.0	104.7	107.2	104.6	101.8	101.8	101.8
Italy	7.5	11.9	41.0	84.8	91.5	98.2	104.3	101.9	100.0	110.0	111.9	111.1	1114.0	113.4
Netherlands	34.6	53.3	93.7	91.4	92.3	95.6	102.1	95.6	93.7	94.0	94.7	98.5	96.6	97.9
Norway	12.8	20.3	50.6	92.2	95.6	100.0	100.9	102.9	107.0	111.4	115.2	121.7	129.5	134.5
Sweden	15.0	20.6	51.0	85.1	92.8	100.0	90.6	83.8	87.4	91.9	90.2	89.2	88.8	88.9
United Kingdom	9.8	14.1	59.0	85.6	93.0	100.1	100.8	99.7	102.9	105.5	108.2	112.7	116.1	114.5
Unit labor costs: U.S. dollar basis														
United States	–	–	78.8	90.5	93.7	97.8	100.6	98.5	94.8	93.5	91.9	92.8	90.2	91.5
Canada	32.2	35.3	66.1	90.4	95.6	104.9	91.0	83.6	83.8	86.1	84.2	80.4	80.0	81.8
Japan	11.0	15.5	51.8	87.1	83.8	91.7	115.4	125.9	131.7	109.6	97.7	92.4	101.2	100.4
Belgium	19.4	27.0	88.3	72.3	89.5	92.3	95.1	94.2	105.2	98.4	81.2	79.9	77.6	68.8
Denmark	13.5	20.3	58.9	72.6	91.3	90.8	93.2	88.3	101.1	106.0	88.6	88.9	88.0	74.8
France	20.9	23.1	76.7	77.6	94.0	93.1	95.7	92.8	100.5	99.0	82.8	80.2	76.8	66.4
Germany	10.4	17.1	59.6	73.0	87.3	87.5	98.6	98.2	114.1	111.3	94.1	90.3	86.6	86.6
Italy	15.0	23.3	59.0	76.1	94.1	97.5	81.6	77.9	77.9	[illegible]	80.9	78.8	77.3	66.6
Netherlands	18.1	25.9	82.9	75.8	89.1	89.9	96.6	92.4	102.7	98.1	85.3	85.5	82.1	72.1
Norway	11.2	17.6	63.9	82.9	95.0	95.7	88.3	90.7	106.0	107.1	101.0	100.2	103.1	94.8
Sweden	16.9	23.1	70.2	76.8	91.3	98.3	87.8	83.2	71.3	79.8	88.8	85.3	82.5	55.2
United Kingdom	15.8	19.1	77.7	79.4	93.9	100.1	85.7	86.5	92.0	93.2	100.3	105.8	108.3	98.3

NOTE: Data for Germany for years before 1992 are for the former West Germany. Data for 1992 onward are for unified Germany. Dash indicates data not available.

50. Occupational injury and illness rates by industry,[1] United States

Industry and type of case[2]	1989 [1]	1990	1991	1992	1993 [4]	1994 [4]	1995 [4]	1996 [4]	1997 [4]	1998 [4]	1999 [4]	2000 [4]
PRIVATE SECTOR[3]												
Total cases	8.6	8.8	8.4	8.9	8.5	8.4	8.1	7.4	7.1	6.7	6.3	6.1
Lost workday cases	4.0	4.1	3.9	3.9	3.8	3.8	3.6	3.4	3.3	3.1	3.0	3.0
Lost workdays	78.7	84.0	86.5	93.8	–	–	–	–	–	–	–	–
Agriculture, forestry, and fishing[3]												
Total cases	10.9	11.6	10.8	11.6	11.2	10.0	9.7	8.7	8.4	7.9	7.3	7.1
Lost workday cases	5.7	5.9	5.4	5.4	5.0	4.7	4.3	3.9	4.1	3.9	3.4	3.6
Lost workdays	100.9	112.2	108.3	126.9	–	–	–	–	–	–	–	–
Mining												
Total cases	8.5	8.3	7.4	7.3	6.8	6.3	6.2	5.4	5.9	4.9	4.4	4.7
Lost workday cases	4.8	5.0	4.5	4.1	3.9	3.9	3.9	3.2	3.7	2.9	2.7	3.0
Lost workdays	137.2	119.5	129.9	204.7	–	–	–	–	–	–	–	–
Construction												
Total cases	14.3	14.2	13.0	13.1	12.2	11.8	10.6	9.9	9.5	8.8	8.6	8.3
Lost workday cases	6.8	6.7	6.1	5.8	5.5	5.5	4.9	4.5	4.4	4.0	4.2	4.1
Lost workdays	143.3	147.9	148.1	161.9	–	–	–	–	–	–	–	–
General building contractors:												
Total cases	13.9	13.4	12.0	12.2	11.5	10.9	9.8	9.0	8.5	8.4	8.0	7.8
Lost workday cases	6.5	6.4	5.5	5.4	5.1	5.1	4.4	4.0	3.7	3.9	3.7	3.9
Lost workdays	137.3	137.6	132.0	142.7	–	–	–	–	–	–	–	–
Heavy construction, except building:												
Total cases	13.8	13.8	12.8	12.1	11.1	10.2	9.9	9.0	8.7	8.2	7.8	7.6
Lost workday cases	6.5	6.3	6.0	5.4	5.1	5.0	4.8	4.3	4.3	4.1	3.8	3.7
Lost workdays	147.1	144.6	160.1	165.8	–	–	–	–	–	–	–	–
Special trades contractors:												
Total cases	14.6	14.7	13.5	13.8	12.8	12.5	11.1	10.4	10.0	9.1	8.9	8.6
Lost workday cases	6.9	6.9	6.3	6.1	5.8	5.8	5.0	4.8	4.7	4.1	4.4	4.3
Lost workdays	144.9	153.1	151.3	168.3	–	–	–	–	–	–	–	–
Manufacturing												
Total cases	13.1	13.2	12.7	12.5	12.1	12.2	11.6	10.6	10.3	9.7	9.2	9.0
Lost workday cases	5.8	5.8	5.6	5.4	5.3	5.5	5.3	4.9	4.8	4.7	4.6	4.5
Lost workdays	113.0	120.7	121.5	124.6	–	–	–	–	–	–	–	–
Durable goods:												
Total cases	14.1	14.2	13.6	13.4	13.1	13.5	12.8	11.6	11.3	10.7	10.1	–
Lost workday cases	6.0	6.0	5.7	5.5	5.4	5.7	5.6	5.1	5.1	5.0	4.8	–
Lost workdays	116.5	123.3	122.9	126.7	–	–	–	–	–	–	–	–
Lumber and wood products:												
Total cases	18.4	18.1	16.8	16.3	15.9	15.7	14.9	14.2	13.5	13.2	13.0	12.1
Lost workday cases	9.4	8.8	8.3	7.6	7.6	7.7	7.0	6.8	6.5	6.8	6.7	6.1
Lost workdays	177.5	172.5	172.0	165.8	–	–	–	–	–	–	–	–
Furniture and fixtures:												
Total cases	16.1	16.9	15.9	14.8	14.6	15.0	13.9	12.2	12.0	11.4	11.5	11.2
Lost workday cases	7.2	7.8	7.2	6.6	6.5	7.0	6.4	5.4	5.8	5.7	5.9	5.9
Lost workdays	–	–	–	128.4	–	–	–	–	–	–	–	–
Stone, clay, and glass products:												
Total cases	15.5	15.4	14.8	13.6	13.8	13.2	12.3	12.4	11.8	11.8	10.7	10.4
Lost workday cases	7.4	7.3	6.8	6.1	6.3	6.5	5.7	6.0	5.7	6.0	5.4	5.5
Lost workdays	149.8	160.5	156.0	152.2	–	–	–	–	–	–	–	–
Primary metal industries:												
Total cases	18.7	19.0	17.7	17.5	17.0	16.8	16.5	15.0	15.0	14.0	12.9	12.6
Lost workday cases	8.1	8.1	7.4	7.1	7.3	7.2	7.2	6.8	7.2	7.0	6.3	6.3
Lost workdays	168.3	180.2	169.1	175.5	–	–	–	–	–	–	–	–
Fabricated metal products:												
Total cases	18.5	18.7	17.4	16.8	16.2	16.4	15.8	14.4	14.2	13.9	12.6	11.9
Lost workday cases	7.9	7.9	7.1	6.6	6.7	6.7	6.9	6.2	6.4	6.5	6.0	5.5
Lost workdays	147.6	155.7	146.6	144.0	–	–	–	–	–	–	–	–
Industrial machinery and equipment:												
Total cases	12.1	12.0	11.2	11.1	11.1	11.6	11.2	9.9	10.0	9.5	8.5	8.2
Lost workday cases	4.8	4.7	4.4	4.2	4.2	4.4	4.4	4.0	4.1	4.0	3.7	3.6
Lost workdays	86.8	88.9	86.6	87.7	–	–	–	–	–	–	–	–
Electronic and other electrical equipment:												
Total cases	9.1	9.1	8.6	8.4	8.3	8.3	7.6	6.8	6.6	5.9	5.7	5.7
Lost workday cases	3.9	3.8	3.7	3.6	3.5	3.6	3.3	3.1	3.1	2.8	2.8	2.9
Lost workdays	77.5	79.4	83.0	81.2	–	–	–	–	–	–	–	–
Transportation equipment:												
Total cases	17.7	17.8	18.3	18.7	18.5	19.6	18.6	16.3	15.4	14.6	13.7	13.7
Lost workday cases	6.8	6.9	7.0	7.1	7.1	7.8	7.9	7.0	6.6	6.6	6.4	6.3
Lost workdays	138.6	153.7	166.1	186.6	–	–	–	–	–	–	–	–
Instruments and related products:												
Total cases	5.6	5.9	6.0	5.9	5.6	5.9	5.3	5.1	4.8	4.0	4.0	4.5
Lost workday cases	2.5	2.7	2.7	2.7	2.5	2.7	2.4	2.3	2.3	1.9	1.8	2.2
Lost workdays	55.4	57.8	64.4	65.3	–	–	–	–	–	–	–	–
Miscellaneous manufacturing industries:												
Total cases	11.1	11.3	11.3	10.7	10.0	9.9	9.1	9.5	8.9	8.1	8.4	7.2
Lost workday cases	5.1	5.1	5.1	5.0	4.6	4.5	4.3	4.4	4.2	3.9	4.0	3.6
Lost workdays	97.6	113.1	104.0	108.2	–	–	–	–	–	–	–	–

See footnotes at end of table.

50. Continued—Occupational injury and illness rates by industry,[1] United States

Industry and type of case[2]	1989[1]	1990	1991	1992	1993[4]	1994[4]	1995[4]	1996[4]	1997[4]	1998[4]	1999[4]	2000[4]
Nondurable goods:												
Total cases	11.6	11.7	11.5	11.3	10.7	10.5	9.9	9.2	8.8	8.2	7.8	–
Lost workday cases	5.5	5.6	5.5	5.3	5.0	5.1	4.9	4.6	4.4	4.3	4.2	–
Lost workdays	107.8	116.9	119.7	121.8	–	–	–	–	–	–	–	–
Food and kindred products:												
Total cases	18.5	20.0	19.5	18.8	17.6	17.1	16.3	15.0	14.5	13.6	12.7	12.4
Lost workday cases	9.3	9.9	9.9	9.5	8.9	9.2	8.7	8.0	8.0	7.5	7.3	7.3
Lost workdays	174.7	202.6	207.2	211.9	–	–	–	–	–	–	–	–
Tobacco products:												
Total cases	8.7	7.7	6.4	6.0	5.8	5.3	5.6	6.7	5.9	6.4	5.5	6.2
Lost workday cases	3.4	3.2	2.8	2.4	2.3	2.4	2.6	2.8	2.7	3.4	2.2	3.1
Lost workdays	64.2	62.3	52.0	42.9	–	–	–	–	–	–	–	–
Textile mill products:												
Total cases	10.3	9.6	10.1	9.9	9.7	8.7	8.2	7.8	6.7	7.4	6.4	6.0
Lost workday cases	4.2	4.0	4.4	4.2	4.1	4.0	4.1	3.6	3.1	3.4	3.2	3.2
Lost workdays	81.4	85.1	88.3	87.1	–	–	–	–	–	–	–	–
Apparel and other textile products:												
Total cases	8.6	8.8	9.2	9.5	9.0	8.9	8.2	7.4	7.0	6.2	5.8	6.1
Lost workday cases	3.8	3.9	4.2	4.0	3.8	3.9	3.6	3.3	3.1	2.6	2.8	3.0
Lost workdays	80.5	92.1	99.9	104.6	–	–	–	–	–	–	–	–
Paper and allied products:												
Total cases	12.7	12.1	11.2	11.0	9.9	9.6	8.5	7.9	7.3	7.1	7.0	6.5
Lost workday cases	5.8	5.5	5.0	5.0	4.6	4.5	4.2	3.8	3.7	3.7	3.7	3.4
Lost workdays	132.9	124.8	122.7	125.9	–	–	–	–	–	–	–	–
Printing and publishing:												
Total cases	6.9	6.9	6.7	7.3	6.9	6.7	6.4	6.0	5.7	5.4	5.0	5.1
Lost workday cases	3.3	3.3	3.2	3.2	3.1	3.0	3.0	2.8	2.7	2.8	2.6	2.6
Lost workdays	63.8	69.8	74.5	74.8	–	–	–	–	–	–	–	–
Chemicals and allied products:												
Total cases	7.0	6.5	6.4	6.0	5.9	5.7	5.5	4.8	4.8	4.2	4.4	4.2
Lost workday cases	3.2	3.1	3.1	2.8	2.7	2.8	2.7	2.4	2.3	2.1	2.3	2.2
Lost workdays	63.4	61.6	62.4	64.2	–	–	–	–	–	–	–	–
Petroleum and coal products:												
Total cases	6.6	6.6	6.2	5.9	5.2	4.7	4.8	4.6	4.3	3.9	4.1	3.7
Lost workday cases	3.3	3.1	2.9	2.8	2.5	2.3	2.4	2.5	2.2	1.8	1.8	1.9
Lost workdays	68.1	77.3	68.2	71.2	–	–	–	–	–	–	–	–
Rubber and miscellaneous plastics products:												
Total cases	16.2	16.2	15.1	14.5	13.9	14.0	12.9	12.3	11.9	11.2	10.1	10.7
Lost workday cases	8.0	7.8	7.2	6.8	6.5	6.7	6.5	6.3	5.8	5.8	5.5	5.8
Lost workdays	147.2	151.3	150.9	153.3	–	–	–	–	–	–	–	–
Leather and leather products:												
Total cases	13.6	12.1	12.5	12.1	12.1	12.0	11.4	10.7	10.6	9.8	10.3	9.0
Lost workday cases	6.5	5.9	5.9	5.4	5.5	5.3	4.8	4.5	4.3	4.5	5.0	4.3
Lost workdays	130.4	152.3	140.8	128.5	–	–	–	–	–	–	–	–
Transportation and public utilities												
Total cases	9.2	9.6	9.3	9.1	9.5	9.3	9.1	8.7	8.2	7.3	7.3	–
Lost workday cases	5.3	5.5	5.4	5.1	5.4	5.5	5.2	5.1	4.8	4.3	4.4	4.3
Lost workdays	121.5	134.1	140.0	144.0	–	–	–	–	–	–	–	–
Wholesale and retail trade												
Total cases	8.0	7.9	7.6	8.4	8.1	7.9	7.5	6.8	6.7	6.5	6.1	–
Lost workday cases	3.6	3.5	3.4	3.5	3.4	3.4	3.2	2.9	3.0	2.8	2.7	–
Lost workdays	63.5	65.6	72.0	80.1	–	–	–	–	–	–	–	–
Wholesale trade:												
Total cases	7.7	7.4	7.2	7.6	7.8	7.7	7.5	6.6	6.5	6.5	6.3	5.8
Lost workday cases	4.0	3.7	3.7	3.6	3.7	3.8	3.6	3.4	3.2	3.3	3.3	–
Lost workdays	71.9	71.5	79.2	82.4	–	–	–	–	–	–	–	–
Retail trade:												
Total cases	8.1	8.1	7.7	8.7	8.2	7.9	7.5	6.9	6.8	6.5	6.1	–
Lost workday cases	3.4	3.4	3.3	3.4	3.3	3.3	3.0	2.8	2.9	2.7	2.5	–
Lost workdays	60.0	63.2	69.1	79.2	–	–	–	–	–	–	–	–
Finance, insurance, and real estate												
Total cases	2.0	2.4	2.4	2.9	2.9	2.7	2.6	2.4	2.2	.7	1.8	1.9
Lost workday cases	.9	1.1	1.1	1.2	1.2	1.1	1.0	.9	.9	.5	.8	.8
Lost workdays	17.6	27.3	24.1	32.9	–	–	–	–	–	–	–	–
Services												
Total cases	5.5	6.0	6.2	7.1	6.7	6.5	6.4	6.0	5.6	5.2	4.9	4.9
Lost workday cases	2.7	2.8	2.8	3.0	2.8	2.8	2.8	2.6	2.5	2.4	2.2	2.2
Lost workdays	51.2	56.4	60.0	68.6	–	–	–	–	–	–	–	–

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[1] Data for 1989 and subsequent years are based on the *Standard Industrial Classification Manual*, 1987 Edition. For this reason, they are not strictly comparable with data for the years 1985–88, which were based on the *Standard Industrial Classification Manual*, 1972 Edition, 1977 Supplement.

[2] Beginning with the 1992 survey, the annual survey measures only nonfatal injuries and illnesses, while past surveys covered both fatal and nonfatal incidents. To better address fatalities, a basic element of workplace safety, BLS implemented the Census of Fatal Occupational Injuries.

[3] The incidence rates represent the number of injuries and illnesses or lost workdays per 100 full-time workers and were calculated as (N/EH) X 200,000, where:

N = number of injuries and illnesses or lost workdays;

EH = total hours worked by all employees during the calendar year; and

200,000 = base for 100 full-time equivalent workers (working 40 hours per week, 50 weeks per year).

[4] Beginning with the 1993 survey, lost workday estimates will not be generated. As of 1992, BLS began generating percent distributions and the median number of days away from work by industry and for groups of workers sustaining similar work disabilities.

[5] Excludes farms with fewer than 11 employees since 1976.

Dash indicates data not available.

51. Fatal occupational injuries by event or exposure, 1994-2000

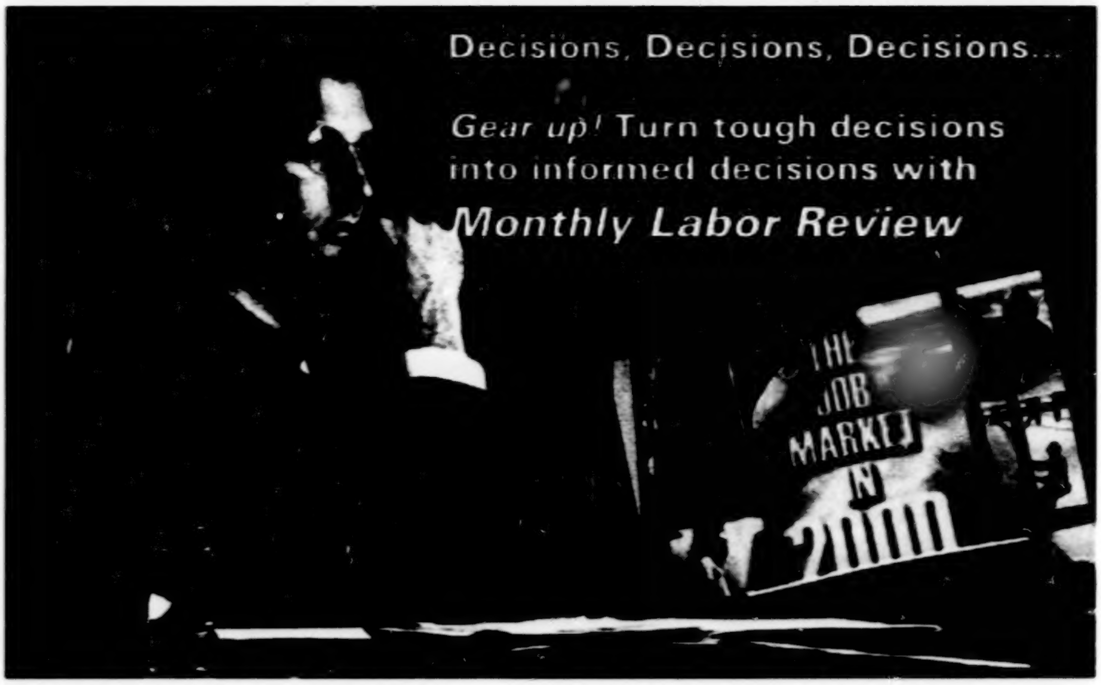
Event or exposure[1]	Fatalities			
	1994-98	1999[2]	2000	
	Average	Number	Number	Percent
Total	6,280	6,054	5,915	100
Transportation incidents	2,640	2,618	2,571	43
Highway incident	1,374	1,496	1,363	23
Collision between vehicles, mobile equipment	682	714	694	12
Moving in same direction	113	129	136	2
Moving in opposite directions, oncoming	240	270	243	4
Moving in intersection	136	161	153	3
Vehicle struck stationary object or equipment	272	334	279	5
Noncollision incident	368	390	356	6
Jackknifed or overturned—no collision	280	322	304	5
Nonhighway (farm, industrial premises) incident	387	352	369	7
Overturned	215	206	213	4
Aircraft	304	228	280	5
Worker struck by a vehicle	382	377	370	6
Water vehicle incident	104	102	84	1
Railway	78	56	71	1
Assaults and violent acts	1,168	909	929	16
Homicides	923	651	677	11
Shooting	748	509	533	9
Stabbing	68	62	66	1
Other, including bombing	107	80	78	1
Self-inflicted injuries	215	218	220	4
Contact with objects and equipment	984	1,030	1,005	17
Struck by object	564	585	570	10
Struck by falling object	364	358	357	6
Struck by flying object	60	55	61	1
Caught in or compressed by equipment or objects	281	302	294	5
Caught in running equipment or machinery	148	163	157	3
Caught in or crushed in collapsing materials	124	129	123	2
Falls	686	721	734	12
Fall to lower level	609	634	659	11
Fall from ladder	101	96	110	2
Fall from roof	148	153	150	3
Fall from scaffold, staging	89	92	85	2
Fall on same level	53	70	56	1
Exposure to harmful substances or environments	583	533	480	8
Contact with electric current	322	280	256	4
Contact with overhead power lines	136	125	128	2
Contact with temperature extremes	45	51	29	–
Exposure to caustic, noxious, or allergenic substances	118	108	100	2
Inhalation of substances	68	56	48	1
Oxygen deficiency	98	92	93	2
Drowning, submersion	77	75	74	1
Fires and explosions	199	216	177	3
Other events or exposures[3]	21	27	19	–

[1] Based on the 1992 BLS Occupational Injury and Illness Classification Structures.

[2] The BLS news release issued August 17, 2000, reported a total of 6,023 fatal work injuries for calendar year 1999. Since then, an additional 31 job-related fatalities were identified, bringing the total job-related fatality count for 1999 to 6,054.

[3] Includes the category "Bodily reaction and exertion."

NOTE: Totals for major categories may include subcategories not shown separately. Percentages may not add to totals because of rounding. Dash indicates less than 0.5 percent.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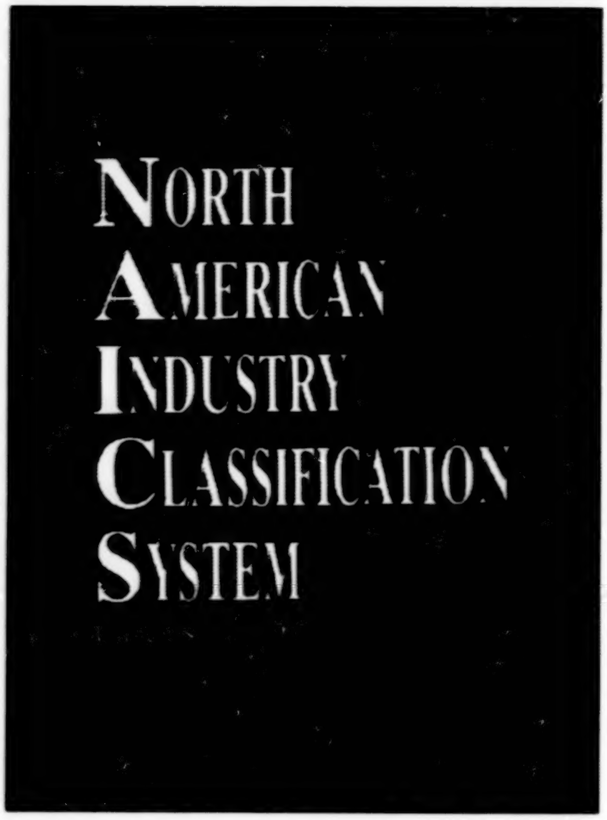

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